

# UNIVERSIDAD NACIONAL DE CHIMBORAZO



## FACULTAD DE INGENIERÍA CARRERA DE INGENIERÍA EN SISTEMAS Y COMPUTACIÓN

Proyecto de Investigación previo a la obtención del título de Ingeniero en Sistemas y  
computación

TRABAJO DE TITULACIÓN

**ANÁLISIS DEL DESEMPEÑO ENTRE DAPPER Y ENTITY FRAMEWORK,  
CASO APLICATIVO: SISTEMA DE BUENAS PRÁCTICAS EN EMPRESAS  
TURÍSTICAS DE RIOBAMBA.**

**AUTORES:**

Jayron Omar Silva Rivera  
Anjelo Xavier Minango Guatumillo

**TUTOR:**

MsC. Pamela Alexandra Buñay Guisñan

**Riobamba – Ecuador**

**2019**



UNIVERSIDAD NACIONAL DE CHIMBORAZO  
FACULTAD DE INGENIERÍA  
CARRERA DE INGENIERÍA EN SISTEMAS Y COMPUTACIÓN

Los miembros del tribunal del proyecto de investigación del título “ANÁLISIS DEL DESEMPEÑO ENTRE DAPPER Y ENTITY FRAMEWORK, CASO APLICATIVO: SISTEMA DE BUENAS PRÁCTICAS EN EMPRESAS TURÍSTICAS DE RIOBAMBA”, presentado por: Jayron Omar Silva Rivera y Anjelo Xavier Minango Guatumillo, dirigida por: MsC. Pamela Alexandra Buñay Guisñan.

Una vez escuchada la defensa oral y revisado el informe del proyecto de investigación con fines de graduación escrito en la cual se ha constatado el cumplimiento de las observaciones realizadas, remite la presente para uso y custodia en la biblioteca de la facultad de Ingeniería de la UNACH.

Por la constancia de lo expuesto firman:

MsC. Pamela Alexandra Buñay Guisñan  
**Director del Proyecto**



Firma

PhD. Fernando Tiverio Molina Granja  
**Miembro del Tribunal**



Firma

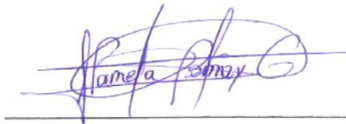
MsC. Diego Marcelo Reina Haro  
**Miembro del Tribunal**



Firma

### DECLARACIÓN EXPRESA DE TUTORA

Yo, Pamela Alexandra Buñay Guisñan docente de la carrera de Sistemas y Computación en calidad de tutora en el proyecto de tesis con el tema: **“ANÁLISIS DEL DESEMPEÑO ENTRE DAPPER Y ENTITY FRAMEWORK, CASO APLICATIVO: SISTEMA DE BUENAS PRÁCTICAS EN EMPRESAS TURÍSTICA DE RIOBAMBA”**, propuesto por: Jayron Omar Silva Rivera y Anjelo Xavier Minango Guatumillo, egresados de la carrera de Sistemas y Computación de la facultad de Ingeniería , luego de haber realizado las respectivas correcciones certifico que se encuentra apto para la defensa pública del proyecto. Es todo cuanto puedo certificar en honor a la verdad, facultando a la interesada hacer uso del presente para los trámites correspondientes.



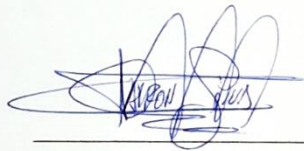
---

Msc. Pamela Alexandra Buñay Guisñan

Docente de la Carrera de Sistemas y Computación

## AUTORÍA

Nosotros, Jayron Omar Silva Rivera con C.I 060552274-7 y Anjelo Xavier Minango Guatumillo con C.I 180387624-0, somos responsables de las ideas, doctrinas y resultados expuestos en el presente proyecto de investigación titulada “**ANÁLISIS DEL DESEMPEÑO ENTRE DAPPER Y ENTITY FRAMEWORK, CASO APLICATIVO: SISTEMA DE BUENAS PRÁCTICAS EN EMPRESAS TURÍSTICAS DE RIOBAMBA**”, y el patrimonio intelectual de la misma pertenece a la Universidad Nacional De Chimborazo.



**Jayron Omar Silva Rivera**

**C.I. 0605522747**



**Anjelo Xavier Minango Guatumillo**

**C.I. 1803876240**

## **DEDICATORIA**

A Dios por darnos la oportunidad de superarnos cada día, por ser el apoyo y consuelo en los momentos más difíciles de la carrera y darnos la bendición para lograr éxitos a lo largo de vida académica.

Jayron Silva & Anjelo Minango

A mí madre, por ser mi apoyo incondicional, que gracias a su esfuerzo y trabajo me han dado todo para mi formación y cumplir una meta más en mi vida, a mis hermanas y cuñados que con cada consejo supieron guiarme hacia tan grata recompensa, a todos mis amigos y compañeros que me han regalado momentos únicos los cuales me ayudaron a crecer como ser humano y profesional.

Jayron Silva

## **AGRADECIMIENTOS**

Agradecemos a Dios por la vida y sabiduría que nos brinda para seguir adelante cumpliendo nuestros objetivos una de ella nuestra carrera universitaria.

A nuestros padres y hermanos por ser el pilar de nuestras vidas, por darnos su apoyo moral y acompañarnos siempre en nuestra preparación académica.

A nuestros docentes, compañeros y amigos que ahora son parte de nuestra familia y con quienes vivimos tristezas, alegrías y logros. Les agradecemos por brindarnos su amistad desinteresada, apoyarnos y compartir hermosos e inolvidables momentos.

A la Ingeniera Pamela Buñay, director del trabajo de titulación, por su ayuda, consejos y asesoramiento en la investigación.

Agradecemos también de manera muy especial a la Universidad Nacional de Chimborazo, a la Facultad de Ingeniería y a la Carrera de Sistemas y Computación ya que gracias a ella hemos adquiridos valiosos conocimientos.

Jayron Silva & Anjelo Minango

ÍNDICE GENERAL	
AUTORÍA .....	I
DEDICATORIA .....	II
AGRADECIMIENTOS .....	III
ÍNDICE GENERAL .....	IV
ÍNDICE DE FIGURAS .....	VI
ÍNDICE TABLAS .....	IX
RESUMEN .....	X
ABSTRACT .....	XI
INTRODUCCIÓN .....	1
CAPÍTULO I .....	3
PROBLEMA .....	3
OBJETIVOS .....	4
OBJETIVO GENERAL .....	4
OBJETIVO ESPECIFICO.....	4
CAPÍTULO II.....	5
MARCO TEÓRICO .....	5
CAPA DE ABSTRACCIÓN DE DATOS .....	5
ORM .....	5
BENEFICIOS DE LOS ORMs .....	6
ENTITY FRAMEWORK.....	6
DAPPER.....	7
ISO/IEC 25010 .....	7
CAPITULO III. ....	9
METODOLOGÍA.....	9
TIPO DE INVESTIGACIÓN .....	9
DISEÑO DE INVESTIGACIÓN .....	11
UNIDAD DE ANÁLISIS .....	15
POBLACIÓN DE ESTUDIO .....	15
MUESTRA .....	16
TÉCNICAS DE RECOLECCIÓN DE DATOS.....	16
TÉCNICAS DE ANÁLISIS .....	19
CAPÍTULO IV. ....	20
RESULTADOS .....	20
DEFINICIÓN DE LAS MÉTRICAS DE EVALUACIÓN.....	20

ANÁLISIS COMPARATIVO DE LA EFICIENCIA DE DESEMPEÑO MEDIANTE UN PROTOTIPO DESARROLLADO CON DAPPER FRENTE A OTRO DESARROLLADO CON ENTITY FRAMEWORK EN ASP.NET C# .....	21
SISTEMA DE BUENAS PRÁCTICAS PARA LAS EMPRESAS TURÍSTICAS DE RIOBAMBA, UTILIZANDO EL ORM CON MEJOR EFICIENCIA DE DESEMPEÑO EN LA CAPA DE ACCESO A DATOS SEGÚN EL ANÁLISIS COMPARATIVO.....	41
CONCLUSIONES.....	47
RECOMENDACIONES .....	48
REFERENCIAS BIBLIOGRÁFICAS .....	49
ANEXOS.....	50
ANEXO 1. DESARROLLO DE PROTOTIPOS .....	50
ANEXO 2. RECOPIACIÓN DE DATOS .....	51
ANEXO 3. PRUEBA DE NORMALIDAD.....	150
ANEXO 4. PRUEBA U DE MANN WHITNEY – COMPROBACIÓN DE HIPOTESIS .....	153



## ÍNDICE DE FIGURAS

<b>Ilustración 1.</b> Calidad del producto software ISO/IEC 25010 .....	8
<b>Ilustración 2.</b> Diseño de investigación .....	11
<b>Ilustración 3.</b> Prototipo DAPPER. ....	12
<b>Ilustración 4.</b> Prototipo ENTITY FRAMEWORK .....	12
<b>Ilustración 5.</b> Base de datos de los prototipos .....	12
<b>Ilustración 6.</b> Escenario 1 prototipos .....	13
<b>Ilustración 7.</b> Escenario 2 prototipos .....	13
<b>Ilustración 8.</b> Tiempo de respuesta(ms) DAPPER y ENTITY FRAMEWORK .....	21
<b>Ilustración 9.</b> Jmeter-Utilización de recursos-Insertar- DAPPER vs ENTITY FRAMEWORK .....	22
<b>Ilustración 10.</b> Jmeter-Utilización de recursos- Mostrar- DAPPER vs ENTITY FRAMEWORK .....	23
<b>Ilustración 11.</b> Jmeter-Utilización de recursos-Actualizar-DAPPER vs ENTITY FRAMEWORK .....	24
<b>Ilustración 12.</b> Jmeter-Utilización de recursos-Eliminar-DAPPER vs ENTITY FRAMEWORK .....	25
<b>Ilustración 13.</b> Código-Tiempo de respuesta(ms)-Insertar-DAPPER vs ENTITY FRAMEWORK .....	27
<b>Ilustración 14.</b> Código-Utilización de recursos- Mostrar-DAPPER vs ENTITY FRAMEWORK .....	28
<b>Ilustración 15.</b> Código-Utilización de recursos-Actualizar-DAPPER vs ENTITY FRAMEWORK .....	29
<b>Ilustración 16.</b> Código-Utilización de recursos-Eliminar-DAPPER vs ENTITY FRAMEWORK .....	30
<b>Ilustración 17.</b> Tiempo de respuesta - DAPPER vs ENTITY FRAMEWORK.....	36
<b>Ilustración 18.</b> Reunión grupo de investigación .....	41
<b>Ilustración 19.</b> Arquitectura de software .....	42
<b>Ilustración 20.</b> Página web Buenas Prácticas .....	42
<b>Ilustración 21.</b> Esquema de base de datos .....	43
<b>Ilustración 22.</b> Caso de uso - Administrador .....	43
<b>Ilustración 23.</b> Caso de uso - Evaluador .....	44
<b>Ilustración 24.</b> Caso de uso - Representante Empresarial .....	44
<b>Ilustración 25.</b> Diagrama de despliegue .....	45
<b>Ilustración 26.</b> Diagrama de clases .....	45
<b>Ilustración 27.</b> Diagrama de componentes .....	46
<b>Ilustración 28.</b> Desarrollo de prototipos - Nuevo proyecto.....	50
<b>Ilustración 29.</b> Prototipo DAPPER con 4 capas.....	50
<b>Ilustración 30.</b> Prototipo ENTITY FRAMEWORK con 4 capas .....	50
<b>Ilustración 31.</b> Recolección de datos con JMeter.....	51
<b>Ilustración 32.</b> Recolección de datos con Visual Studio .....	51
<b>Ilustración 33.</b> Datos Capacidad Tiempos de repuesta insertar .....	136
<b>Ilustración 34.</b> Datos Capacidad Tiempos de respuesta mostrar .....	136
<b>Ilustración 35.</b> Datos Capacidad Tiempos de respuesta Actualizar .....	137
<b>Ilustración 36.</b> Datos Capacidad Tiempo de respuesta Eliminar .....	137
<b>Ilustración 37.</b> Datos con Jmeter, para la métrica Capacidad, Utilización de recursos CPU .....	138
<b>Ilustración 38.</b> Datos con Jmeter, para la métrica Capacidad, Utilización de recursos Disco .....	138

<b>Ilustración 39.</b> Datos con Jmeter, para la métrica Capacidad, Utilización de recursos RAM .....	139
<b>Ilustración 40.</b> Datos con System.Diagnostic en Visual Studio, para la métrica Capacidad, Utilización de recursos CPU .....	139
<b>Ilustración 41.</b> Datos con System.Diagnostic en Visual Studio, para la métrica Capacidad, Utilización de recursos Disco .....	140
<b>Ilustración 42.</b> Datos con System.Diagnostic en Visual Studio, para la métrica Capacidad, Utilización de recursos RAM .....	140
<b>Ilustración 43.</b> Datos con Jmeter, para la métrica Capacidad, Utilización de recursos CPU .....	141
<b>Ilustración 44.</b> Datos con Jmeter, para la métrica Capacidad, Utilización de recursos Disco .....	141
<b>Ilustración 45.</b> Datos con Jmeter, para la métrica Capacidad, Utilización de recursos RAM .....	142
<b>Ilustración 46.</b> Datos con System.Diagnostic en Visual Studio, para la métrica Capacidad, Utilización de recursos CPU .....	142
<b>Ilustración 47.</b> Datos con System.Diagnostic en Visual Studio, para la métrica Capacidad, Utilización de recursos Disco .....	143
<b>Ilustración 48.</b> Datos con System.Diagnostic en Visual Studio, para la métrica Capacidad, Utilización de recursos RAM .....	143
<b>Ilustración 49.</b> Datos con JMeter, para la métrica Capacidad, Utilización de recursos CPU .....	144
<b>Ilustración 50.</b> Datos con JMeter, para la métrica Capacidad, Utilización de recursos Disco .....	144
<b>Ilustración 51.</b> Datos con JMeter, para la métrica Capacidad, Recolección de datos RAM .....	145
<b>Ilustración 52.</b> Datos con System.Diagnostic en Visual Studio, para la métrica Capacidad, Utilización de recursos CPU .....	145
<b>Ilustración 53.</b> Datos con System.Diagnostic en Visual Studio, para la métrica Capacidad, utilización de recursos Disco .....	146
<b>Ilustración 54.</b> Datos con System.Diagnostic en Visual Studio, para la métrica Capacidad, Utilización de recursos RAM .....	146
<b>Ilustración 55.</b> Datos con JMeter, para la métrica Capacidad, Utilización de recursos CPU .....	147
<b>Ilustración 56.</b> Datos con JMeter, para la métrica Capacidad, Utilización de recursos Disco .....	147
<b>Ilustración 57.</b> Datos con JMeter, para la métrica Capacidad, Utilización de recursos RAM .....	148
<b>Ilustración 58.</b> Datos con System.Diagnostic en Visual Studio, para la métrica Capacidad, Utilización de recursos CPU .....	148
<b>Ilustración 59.</b> Datos con System.Diagnostic en Visual Studio, para la métrica Capacidad, Utilización de recursos Disco .....	149
<b>Ilustración 60.</b> Datos con System.Diagnostic en Visual Studio, para la métrica Capacidad, Utilización de recursos RAM .....	150
<b>Ilustración 61.</b> Prueba de Normalidad - Tiempo de respuesta(ms) - Métodos CRUD ....	150
<b>Ilustración 62.</b> Prueba de Normalidad - utilización de recursos - Método insertar - Herramienta Jmeter.....	151
<b>Ilustración 63.</b> Prueba de Normalidad - utilización de recursos - Método insertar - Librería System.Diagnostic en Visual Studio .....	151

<b>Ilustración 64.</b> Prueba de Normalidad - utilización de recursos - Método Mostrar - Herramienta Jmeter.....	151
<b>Ilustración 65.</b> Prueba de Normalidad - utilización de recursos - Método Mostrar - Herramienta Jmeter.....	152
<b>Ilustración 66.</b> Prueba de Normalidad - utilización de recursos - Método Actualizar - Herramienta Jmeter.....	152
<b>Ilustración 67.</b> Prueba de Normalidad - utilización de recursos - Método actualizar - Librería System.Diagnostic enVisual Studio .....	152
<b>Ilustración 68.</b> Prueba de Normalidad - utilización de recursos - Método eliminar - Herramienta Jmeter.....	153
<b>Ilustración 69.</b> Prueba de normalidad - Método Eliminar - Librería System.Diagnostic en Visual Studio .....	153
<b>Ilustración 70.</b> Prueba U de Mann-Whitney Tiempos de respuestas .....	153
<b>Ilustración 71.</b> Prueba U de Mann Whitney – Utilización de recursos – Jmeter – Insertar .....	154
<b>Ilustración 72.</b> Prueba U de Mann Whitney – Utilización de recursos – Código – Insertar .....	154
<b>Ilustración 73.</b> Prueba U de Mann Whitney – Utilización de recursos – JMeter – Mostrar .....	154
<b>Ilustración 74.</b> Prueba U de Mann Whitney – Utilización de recursos – Código – Mostrar .....	155
<b>Ilustración 75.</b> Prueba U de Mann Whitney – Utilización de recursos – JMeter – Actualizar.....	155
<b>Ilustración 76.</b> Prueba U de Mann Whitney – Utilización de recursos – Código – Actualizar.....	155
<b>Ilustración 77.</b> Prueba U de Mann Whitney – Utilización de recursos – JMeter – Eliminar .....	156
<b>Ilustración 78.</b> Prueba U de Mann Whitney – Utilización de recursos – Código – Eliminar .....	156

## ÍNDICE TABLAS

<b>Tabla 1.</b> Operacionalización de variables .....	10
<b>Tabla 2.</b> Comportamiento temporal - Tiempos de respuestas .....	17
<b>Tabla 3.</b> Utilización de recursos - Procesador .....	18
<b>Tabla 4.</b> Utilización de recursos - RAM.....	18
<b>Tabla 5.</b> Capacidad CPU, RAM .....	18
<b>Tabla 6.</b> Parámetros de evaluación .....	20
<b>Tabla 7.</b> Tiempo de respuesta(ms) DAPPER y ENTITY FRAMEWORK .....	21
<b>Tabla 8.</b> Jmeter-Utilización de recursos-Insertar-DAPPER vs ENTITY FRAMEWORK	22
<b>Tabla 9.</b> Jmeter-Utilización de recursos-Mostrar-DAPPER vs ENTITY FRAMEWORK	23
<b>Tabla 10.</b> Jmeter-Utilización de recursos- Actualizar- DAPPER vs ENTITY FRAMEWORK .....	24
<b>Tabla 11.</b> Jmeter-Utilización de recursos-Eliminar-DAPPER vs ENTITY FRAMEWORK .....	25
<b>Tabla 12.</b> Código-Tiempo de respuesta(ms)-Insertar-DAPPER vs ENTITY FRAMEWORK .....	26
<b>Tabla 13.</b> Código-Tiempo de respuesta(ms)-Mostrar-DAPPER vs ENTITY FRAMEWORK .....	27
<b>Tabla 14.</b> Código-Utilización de recursos-Actualizar-DAPPER vs ENTITY FRAMEWORK .....	28
<b>Tabla 15.</b> Código-Utilización de recursos-Eliminar-DAPPER vs ENTITY FRAMEWORK .....	29
<b>Tabla 16.</b> Prueba Normalidad - Tiempo de ejecución .....	30
<b>Tabla 17.</b> Prueba de normalidad - Utilización de recursos .....	31
<b>Tabla 18.</b> Análisis comparativo - Tiempos de respuesta – DAPPER vs ENTITY FRAMEWORK .....	32
<b>Tabla 19.</b> Análisis comparativo - Utilización de recursos – DAPPER vs ENTITY FRAMEWORK .....	33
<b>Tabla 20.</b> Análisis comparativo-Capacidad Tiempo de respuesta(ms) -DAPPER vs ENTITY FRAMEWORK.....	34
<b>Tabla 21.</b> Análisis comparativo-Capacidad Utilización de recursos - DAPPER vs ENTITY FRAMEWORK .....	34
<b>Tabla 22.</b> Comportamiento temporal-Diferencia DAPPER vs ENTITY FRAMEWORK	36
<b>Tabla 23.</b> Diferencia de método insertar entre DAPPER vs ENTITY FRAMEWORK ....	37
<b>Tabla 24.</b> Diferencia del método mostrar entre DAPPER y ENTITY FRAMEWORK ....	37
<b>Tabla 25.</b> Diferencia método actualizar entre DAPPER vs ENTITY FRAMEWORK .....	38
<b>Tabla 26.</b> Diferencia método eliminar entre DAPPER vs ENTITY FRAMEWORK.....	38
<b>Tabla 27.</b> Capacidad máxima de utilización de recursos - DAPPER vs ENTITY FRAMEWORK .....	39
<b>Tabla 28.</b> Datos de Visual Studio Tiempos de respuesta.....	52
<b>Tabla 29.</b> Datos DAPPER Insertar .....	66
<b>Tabla 30.</b> Datos DAPPER Mostrar.....	74
<b>Tabla 31.</b> Datos DAPPER Actualizar .....	83
<b>Tabla 32.</b> Datos DAPPER Eliminar .....	92
<b>Tabla 33.</b> Datos ENTITY FRAMEWORK Insertar .....	101
<b>Tabla 34.</b> Datos ENTITY FRAMEWORK Mostrar.....	109
<b>Tabla 35.</b> Datos ENTITY FRAMEWORK Actualizar.....	118
<b>Tabla 36.</b> Datos ENTITY FRAMEWORK Eliminar .....	127

## RESUMEN

Actualmente el turismo está tomando nuevos horizontes, la demanda de parte de consumidores crece, los proveedores de servicios turísticos están desarrollando nuevos programas para extender la actividad turística. El GADM Riobamba en conjunto con la UNACH definieron “Buenas Prácticas” que deben cumplir los prestadores de servicios para obtener un distintivo de calidad otorgado por el municipio. Dicho proceso requería de un sistema web que permita la automatización que ayude a realizar el proceso de autoevaluación, evaluación y la toma de decisiones para mejorar los servicios ofrecidos por los diferentes establecimientos en la ciudad Riobamba. Para el desarrollo del sistema se realizó un análisis comparativo entre DAPPER y ENTITY FRAMEWORK para evaluar la eficiencia de desempeño de la capa de abstracción de acceso a datos. Los indicadores fueron establecidos según las normas ISO/IEC 25010 donde se establece un modelo para la evaluación de la calidad de software, siendo estos: comportamiento temporal, utilización de recursos y capacidad, utilizando dos herramientas; 1) Jmeter con la extensión PerfMon y 2) Librería System.Diagnostics con los métodos TimeSpan y PerformanceCounter las cuales permitieron capturar los tiempos de respuesta y utilización de recursos de los parámetros establecidos anteriormente. Con los resultados obtenidos al medir las métricas en los dos prototipos se determinó que DAPPER mejora la eficacia de desempeño en la capa de abstracción de acceso a datos, implementado el ORM en el Sistema Buenas Prácticas Turismo del cantón Riobamba.

## ABSTRACT

Currently, tourism is taking on new horizons, demand from consumers is increasing, and tourism service providers are developing new programs to extend tourist activity. The GADM Riobamba in agreement with the UNACH defined "Good Practices" that must be met by service providers to obtain a quality badge awarded by the municipality. This process required a web system that allows automation to help carry out the self-assessment, evaluation and decision-making process to improve the services offered by the different establishments in Riobamba city. To develop of the system, a comparative analysis between DAPPER and ENTITY FRAMEWORK was carried out to evaluate the performance efficiency of the data access abstraction layer. The indicators were established according to ISO / IEC 25010 standards where a model for the evaluation of software quality is established, these being: temporal behavior, resource utilization and capacity, using two tools; 1) Jmeter with the PerfMon extension and 2) System.Diagnostics library with the TimeSpan and PerformanceCounter methods which allowed capturing the response times and resource used of the previously established parameters. With the results obtained by measuring the metrics in the two prototypes, it was determined that DAPPER improves the performance efficiency in the data access abstraction layer, implemented the ORM in the Tourism Good Practices System of the Riobamba canton.

Reviewed by: López, Ligia



LINGUISTIC COMPETENCES TEACHER

## INTRODUCCIÓN

La presente tesis es una investigación que tiene por objetivo realizar un análisis comparativo entre DAPPER y ENTITY FRAMEWORK para lo cual se desarrollaron dos prototipos de sistemas web, con la ayuda de las herramientas JMeter y la librería System.Diagnostic se realizaron peticiones para cada método CRUD (Crear, Leer, Actualizar y Borrar), obteniendo los resultados de la eficiencia de desempeño según la norma ISO/IEC 25010 son; tiempos de respuesta, comportamiento temporal, utilización de recursos y capacidad de cada prototipo con su respectivo ORM, posteriormente se llevó un análisis con los resultados obtenidos de cada prototipo y dando como resultado a DAPPER como el más óptimo en cuanto a la eficiencia de desempeño, el mismo que se implementó en el Sistema Buenas Prácticas Turismo del cantón Riobamba.

Para el análisis de la problemática es necesario mencionar sus causas. Actualmente el GADM de Riobamba aplica un conjunto de parámetros conocidos como “Buenas Prácticas” en los llamados prestadores de servicios turísticos del cantón Riobamba, dicha aplicación es un proceso que se ha venido realizando manualmente. Es decir, el proceso consta de visitar el establecimiento que ofrece servicios turísticos, evaluarlo, calificarlo, y tomar las medidas respectivas según su calificación. Para lo cual se hacía uso de recurso humano, tiempo, dinero y disponibilidad de los representantes empresariales para las visitas y evaluaciones de sus respectivos locales. Tomando en cuenta lo mencionado los estudiantes y el grupo de investigación de la UNACH hemos visto este proceso canónico como una oportunidad para automatizar el mismo, y aplicar el caso comparativo entre los ORM DAPPER y ENTITY FRAMEWORK como objeto de investigación, dando como resultado la aplicación del ORM más óptimo al Sistema Buenas Prácticas Turismo del cantón Riobamba el cual permite realizar el proceso “Buenas Prácticas” desde una plataforma Web minimizando el uso de los recursos humanos, tiempo y dinero de las entidades involucradas en el mismo.

El desarrollo de software busca mejorar la productividad de las empresas por medio de la automatización y el uso de herramientas, las empresas que se dedican al desarrollo de software tienen como objetivo ayudar a otras empresas en la automatización y desarrollo de herramientas, pero muchas veces las mismas olvidan su propia productividad. Las Herramientas ORM (Object Relational Mapping) se han ideado con este fin, al evitar repetir muchas líneas de programación en la capa de abstracción, pero es necesario considerar que

cada una tiene su estándar o su propio lenguaje por lo cual se requerir tiempo adicional para ocuparlas. (Bano Naranjo, Chingo Esquivel, & Viscaino, 2016)

El ORM (Mapeo Objeto relacional) es la técnica de programación que nos permite transformar los datos entre el sistema de tipos utilizados en un lenguaje de programación orientado a objetos y el utilizado en una base de datos relacional, utilizando un motor de persistencia. Lo que da como resultado una base de datos orientada a objetos virtual sobre la base de datos relacional. Esta transformación permite el uso de las bondades de la programación orientada a objetos. (Alvial Cid, Saavedra Quevedo, & Valenzuela Parada, 2011)

Con el fin de mejorar la experiencia de desarrollo, disminuir tiempo y costo de desarrollo de software, el mapeo objeto-relacional (ORM) es la técnica más apropiada y conocida actualmente para hacer “compatible” al programa y a la base de datos. (Roger Calderon-Moreno, 2016). Motivo por el cual la presente investigación tiene como objetivo analizar la eficiencia de desempeño de las herramientas Mapeo Objeto-Relacional (ORM) como son DAPPER y ENTITY FRAMEWORK, desarrollando dos prototipos respectivamente y evaluándolos en base a los parámetros que se establecen las normas de calidad del producto de software ISO/IEC 25010, determinando de esta manera la herramienta ORM más adecuada con respecto a los requerimientos para el desarrollo del sistema de buena prácticas en empresas turísticas de Riobamba.



## **CAPÍTULO I.**

### **PROBLEMA**

En la actualidad, la actividad turística está ampliamente extendida por todo el mundo posee gran influencia directa sobre la economía en ciertas regiones, especialmente en aquellos que se encuentran en vías de desarrollo, pero también, se considera destructiva si no es utilizada de forma adecuada, ya que puede acabar con la riqueza de los patrimonios naturales y culturales de cualquier país. Esta es una realidad que surge como consecuencia de diversas actividades económicas, provocando fuertes movimientos internacionales, nacionales y locales, motivando así la aplicación de las buenas prácticas para un turismo sostenible en los sectores empresariales. (Samuel Guillén Herrera, 2017)

El desconocimiento de las buenas prácticas de los prestadores de servicios turísticos del cantón Riobamba define que la gran parte de los empresarios de este sector y sus trabajadores, no son especializados en la rama turística y esto se debe a que no existe el debido control de cumplimiento y mejoramiento de la calidad de dicho servicio por los organismos pertinentes, motivo por el cual, el proyecto de investigación denominado, “BUENAS PRÁCTICAS PARA LA ESTANDARIZACIÓN DE PROCESOS EN LOS PRESTADORES DE SERVICIOS TURÍSTICOS DEL CANTON RIOBAMBA” realizado en enero del 2017 por el grupo de trabajo de investigación de buena prácticas de la UNACH y como director responsable, Héctor Germán Pacheco Sanunga Magíster en Gestión de Empresas Turísticas y Hoteleras realizó un análisis situacional de cada sector prestador de servicios turísticos de Riobamba, permitiendo diseñar los indicadores de buenas prácticas, para que, en base a ello se permita informar y evaluar a las empresas de prestadores de servicios, de esta manera el proyecto no posee una herramienta que permita difundir dicha información mucho menos la evaluación de buenas prácticas a las empresas prestadores de servicios turísticos.

## **JUSTIFICACIÓN**

Actualmente el turismo está tomando nuevos horizontes, la demanda de parte de consumidores crece, los proveedores de servicios turísticos están desarrollando nuevos programas para extender la actividad turística. El GADM Riobamba en conjunto con la UNACH definió buenas prácticas que deben cumplir los prestadores de servicios para obtener un distintivo de calidad otorgado por el municipio. Dicho proceso requería de un sistema web que permita la automatización que ayude a realizar el proceso de autoevaluación, evaluación y la toma de decisiones para mejorar los servicios ofrecidos por los diferentes establecimientos en la ciudad Riobamba.

Es por ello por lo que la UNACH decidió desarrollar un aplicativo web que permita automatizar procesos para autoevaluar y evaluar las buenas prácticas de las empresas turísticas del cantón Riobamba, este proceso se desarrolló mediante el análisis comparativo de DAPPER y ENTITY FRAMEWORK específicamente en la capa de abstracción de base de datos en sus diferentes métodos como insertar, mostrar, actualizar y eliminar, el análisis se limita con respecto a la eficiencia de desempeño definidos a las Normas ISO/IEC 25010.

## **OBJETIVOS**

### **OBJETIVO GENERAL**

Realizar el análisis de eficiencia de desempeño entre DAPPER y ENTITY FRAMEWORK, aplicado al desarrollo del sistema de buenas prácticas para las empresas turísticas del cantón Riobamba.

### **OBJETIVO ESPECIFICO**

- Determinar las métricas de evaluación para el análisis de la eficiencia de desempeño según las normas ISO/IEC 25010.
- Realizar un análisis comparativo de la eficiencia de desempeño mediante un prototipo desarrollado con DAPPER frente a otro desarrollado con ENTITY FRAMEWORK en ASP.NET
- Desarrollar el Sistema de Buenas Prácticas para las empresas turísticas de Riobamba, utilizando el ORM que tiene mejor desempeño según el análisis comparativo.

## **CAPÍTULO II.**

### **MARCO TEÓRICO**

#### **CAPA DE ABSTRACCIÓN DE DATOS**

En la actualidad diversos frameworks de desarrollo de aplicaciones permiten el acceso a diferentes bases de datos relacionales a través del mapeo de objetos-relacional (ORM) con el fin de generar una relación entre los objetos que se definen en la aplicación y las entidades o tablas del modelo relacional. En las entidades se incluyen las relaciones haciendo más fácil la tarea al programador al reducir la complejidad del Structured Query Language (SQL) y la dependencia de todo el desarrollo a un motor de almacenamiento. Las bases de datos relacionales solo permiten almacenar datos de tipo primitivo o escalares para almacenar datos de tipo numérico, cadenas de texto, lógicos, fechas, binarios largos, entre otros. Por lo tanto, por la complejidad de los datos que representan al objeto no es posible llevarla directamente al modelo relacional, la estrategia utilizada por los desarrolladores consiste en descomponer el objeto en una o más tablas o entidades. Para que estos dos componentes: aplicaciones y motores de almacenamiento puedan funcionar juntos, Deben comunicarse entre ellos mediante el intercambio de información para que cada uno adapte a su modelo inicial. (Calderón Moreno & Arenas Seleey, 2016)

En el caso de que toda la aplicación siga el modelo relacional, perdemos las ventajas de la orientación a objetos. Como una solución a esta dificultad surge el concepto de: mapeo objeto-relacional (ORM), el cual es una técnica de programación para convertir datos entre el sistema de tipos utilizado en un lenguaje de programación orientado a objetos y la utilización de una base de datos relacional como motor de persistencia. En la práctica esto crea una base de datos orientada a objetos virtual, sobre la base de datos relacional. Esto posibilita el uso de las características propias de la orientación a objetos (básicamente herencia y polimorfismo). (Calderón Moreno & Arenas Seleey, 2016)

#### **ORM**

Los ORM tienen un objetivo principal, ser herramientas para la representación y la traducción de los datos entre la base de datos y el lenguaje de programación orientado a objetos. Proporciona soporte para las colecciones y las relaciones entre objetos, así como el mapeo de tipos compuestos. El Mapeo Objeto-Relacional es una técnica de representación de datos a partir de un modelo de objetos para un modelo de datos relacional y viceversa.

Este mecanismo se utiliza para la selección, inserción, actualización, eliminación y consulta de registros de las tablas subyacentes. (Castillo Estrada, Karina, & Luis Antonio, 2016).

### **BENEFICIOS DE LOS ORMs**

Hay una serie de beneficios al usar un ORM para el desarrollo de aplicaciones basadas en datos. (Aditya Joshi, 2014)

- Productividad
- Diseño de aplicaciones
- Reutilización de código
- Mantenibilidad de la aplicación

El código de acceso a datos suele ser una parte importante de aplicación compleja y el tiempo necesario para escribir ese código puede ser una parte importante del desarrollo general de la solicitud. Al usar una herramienta ORM, la cantidad de código es improbable que se reduzca. La herramienta ORM genera todos los códigos de acceso a datos significa capa de lógica de negocios y la capa de acceso a datos se genere automáticamente según el modelo de datos que se defina, muy rápidamente.

### **ENTITY FRAMEWORK**

ADO.NET EF es un marco de trabajo para la plataforma .NET que permite superponer varias capas de abstracción sobre un almacén relacional con el fin de hacer posible una programación más conceptual (basada en los conceptos del dominio con el que se trabaja) y de reducir a una mínima expresión el desajuste de impedancias causado por las diferencias entre los modelos de programación relacional y orientado a objetos. (Rodríguez Zambrano & Márquez Restrepo, 2017)

Esta herramienta permite trabajar tres maneras:

- Base de datos primero.
- Modelo primero.
- Código primero.

Para las dos primeras opciones se requiere del EDM6, el cual permite la creación de los modelos Conceptuales y cuenta con: ambiente para graficar los diagramas, ventana de detalles de mapeo, ventana navegación por el modelo y ventana de “herramientas” operando

en con archivos de tipo edmx correspondientes al tipo de archivo que maneja EF para su modelo de entidades. (Rodríguez Zambrano & Márquez Restrepo, 2017)

## **DAPPER**

DAPPER framework fue creado por Samm Saron, y tiene un alto desempeño por usar métodos dinámicos de generación para asignar valores de columna a propiedades. (Rodríguez Zambrano & Márquez Restrepo, 2017)

Provee asistentes para: ejecutar consultas y mapear objetos fuertemente tipados, ejecutar consultas y mapear sus resultados a una lista dinámica de objetos, ejecutar comandos en diferentes momentos. (Rodríguez Zambrano & Márquez Restrepo, 2017)

Las cualidades más destacadas de esta herramienta son: velocidad y rapidez en su rendimiento, pocas líneas de código, mapeo de objetos, enlace de objetos estáticos, enlace a objetos dinámicos, fácil manejo de consultas SQL y procedimientos almacenados, soporte a diferentes consultas, opera directamente en la clase `IDBConnection` entre otras características, que le otorgan un alto desempeño y le permiten la ejecución de operaciones CRUD. (Rodríguez Zambrano & Márquez Restrepo, 2017).

## **ISO/IEC 25010**

La calidad del producto software se puede interpretar como el grado en que dicho producto satisface los requisitos de sus usuarios. Son precisamente estos requisitos (funcionalidad, rendimiento, seguridad, mantenibilidad, etc.) los que se encuentran representados en el modelo de calidad, el cual categoriza la calidad del producto en características y subcaracterísticas. (Roa Molina, Paola ; Morales, Claribel ; Gutiérrez, Patricia;, 2015)

El modelo de calidad del producto definido por la ISO/IEC 25010 se encuentra compuesto por las ocho características de calidad:

**Ilustración 1.** Calidad del producto software ISO/IEC 25010



**Fuente:** ISO/IEC 25010

### **Eficiencia de desempeño**

Esta característica representa el desempeño relativo a la cantidad de recursos utilizados bajo determinadas condiciones. Esta característica se subdivide (ISO, 2018) en:

- **Comportamiento temporal.** Los tiempos de respuesta de un sistema cuando lleva a cabo sus funciones bajo condiciones determinadas en relación con un banco de pruebas (benchmark) establecido. (ISO, 2018)
- **Utilización de recursos.** Las cantidades y tipos de recursos utilizados cuando el software lleva a cabo su función bajo condiciones determinadas. (ISO, 2018)
- **Capacidad.** Grado en que los límites máximos de un parámetro de un producto o sistema software cumplen con los requisitos. (ISO, 2018)

## **CAPITULO III.**

### **METODOLOGÍA**

La metodología utilizada en el desarrollo del presente proyecto de investigación fue utilizada un enfoque cuantitativo que también es llamado como matemático, en el cual su principal característica es la utilización de números y la interpretación de gráficas y tablas, todo ayudado por la estadística. La toma de datos se los realizó bajo las herramientas establecidas por los autores obteniendo resultados basados en la experimentación y observación de las herramientas en su área de desempeño.

### **TIPO DE INVESTIGACIÓN**

De acuerdo con el proyecto propuesto se realizó el análisis de las herramientas Object-Relational Mapping (ORM): DAPPER y ENTITY FRAMEWORK para el cual se aplicaron varias formas de investigación que se presentan a continuación:

- **Investigación documental-bibliográfica**

Este método de investigación está basado las técnicas y estrategias que se emplearon para localizar, identificar y acceder a aquellos documentos como artículos científicos, libros, tesis entre otros, como material de apoyo que respalden el trabajo de investigación y que se encuentran debidamente citas según las normas establecidas.

- **Investigación Experimental**

En este apartado se desarrolló los prototipos en base a las herramientas seleccionadas en sus métodos Insertar, leer, actualizar y eliminar realizando pruebas y obteniendo un resultado basado en la experimentación.

Esta investigación permitirá obtener, analizar e interpretar los datos según las métricas de eficiencia de desempeño obtenido al implementar los ORM siendo el caso de DAPPER y ENTITY FRAMEWORK.

Otros métodos de investigación usados para el desarrollo de esta investigación son:

- **Inductivo:** Mediante este método se observó todas las pruebas realizadas dentro del área investigativo con el propósito de llegar a conclusiones y premisas generales para el análisis.
- **Deductivo:** Se observó el comportamiento de las herramientas ORM para determinar la necesidad de realizar un análisis estadístico comparativo entre DAPPER y ENTITY FRAMEWORK en el desarrollo del sistema propuesto.

- **Comparativo:** La comparación sistemática de casos de análisis se aplicó con fines de generalización empírica y de la verificación de hipótesis.

**a. Planteamiento de Hipótesis**

$H_0$  = No existe una diferencia de eficiencia de desempeño entre DAPPER y ENTITY FRAMEWORK.

$$H_0: Mx = My$$

$H_a$  = Existe una diferencia de eficiencia de desempeño entre DAPPER y ENTITY FRAMEWORK.

$$H_a: Mx \neq My$$

**b. Identificación de variables**

- **Variable Independiente**

DAPPER Y ENTITY FRAMEWORK

- **Variable Dependiente**

Eficiencia del desempeño del ORM en la base de datos del sistema.

**c. Operacionalización de variables**

**Tabla 1.** Operacionalización de variables

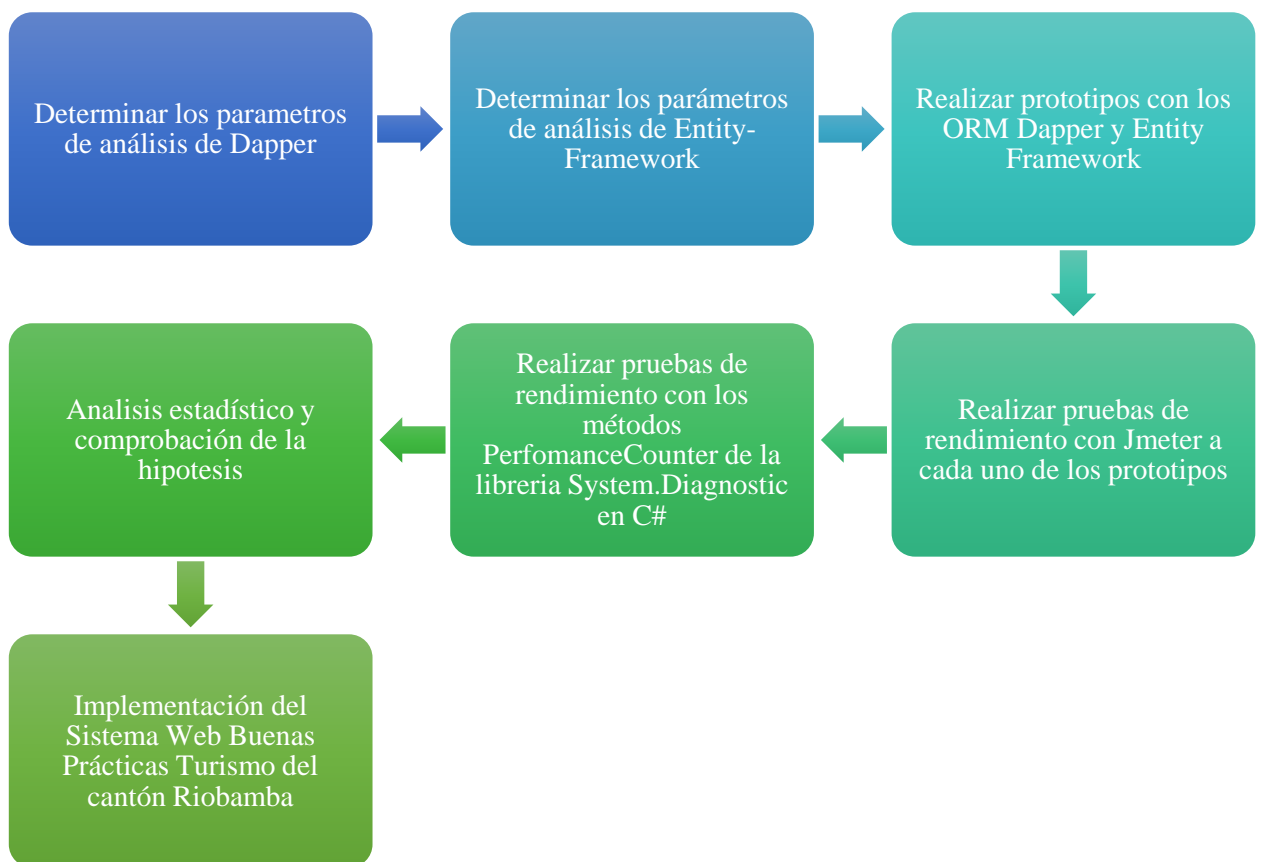
VARIABLE	CONCEPTO	DIMENSIÓN	INDICADOR
INDEPENDIENTE	<b>DAPPER</b> (Es un mapeador de objetos simple para .NET y posee el título de King of Micro ORM en términos de velocidad y es prácticamente tan rápido como usar un lector de datos raw ADO.NET.)	Eficiencia del desempeño Normas ISO/IEC 25010	Tiempo de respuesta(ms) de los Métodos: - Insertar - Mostrar - Actualizar - Eliminar
	<b>ENTITY FRAMEWORK</b> (es un marco ORM que permite a los desarrolladores trabajar con datos relacionales como objetos específicos de dominio)		Utilización de recursos - CPU - Disco - RAM
			Capacidad máxima de recursos - CPU - Disco - RAM



DEPENDIENTE	Eficiencia del desempeño del ORM en la base de datos del sistema	Comportamiento temporal	Tiempo de respuesta(ms) al realizar una petición
		Utilización de recursos	Cantidades y tipos de recursos utilizados <ul style="list-style-type: none"> <li>- CPU</li> <li>- Disco</li> <li>- RAM</li> </ul>
		Capacidad	Grado en que los límites máximos de un parámetro del sistema software cumplen con los requisitos <ul style="list-style-type: none"> <li>- CPU</li> <li>- Disco</li> <li>- RAM</li> </ul>

Elaborado por: Jayron Silva, Anjelo Minango

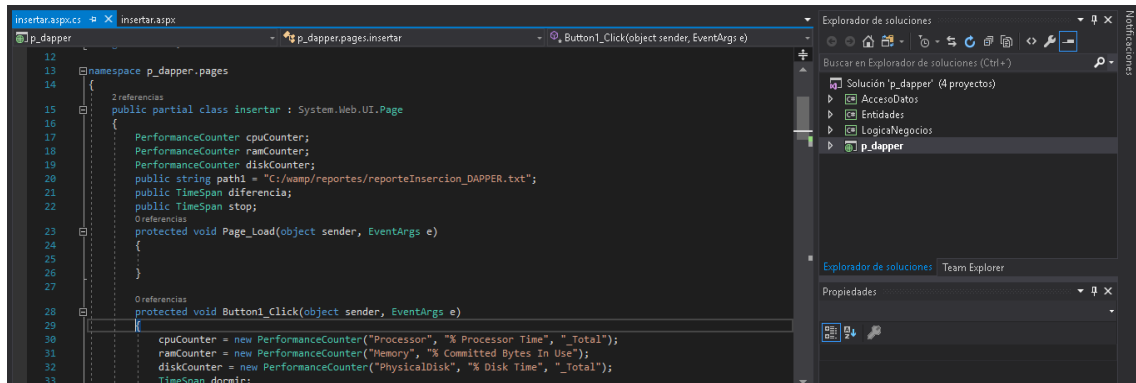
## DISEÑO DE INVESTIGACIÓN



**Ilustración 2.** Diseño de investigación  
Elaborado por: Jayron Silva, Anjelo Minango

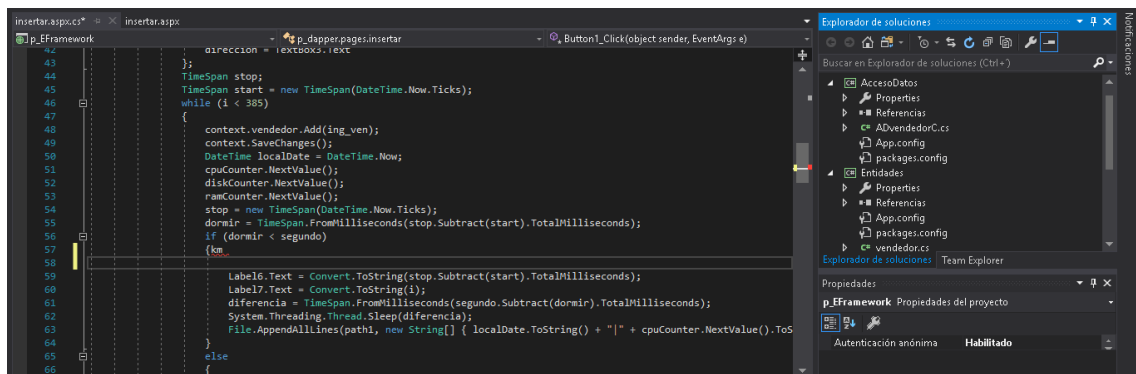
## DESARROLLO DE PROTOTIPOS

Se desarrolló dos aplicaciones web (prototipos), que hacen referencia a una pequeña parte del aplicativo web del sistema de buenas prácticas, en los cuales se implementan las herramientas DAPPER y ENTITY FRAMEWORK con el propósito principal de realizar el análisis comparativo y optar la mejor herramienta para su implementación.



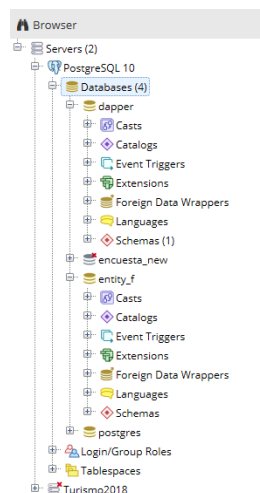
```
12 namespace p_dapper.pages
13 {
14     2 referencias
15     public partial class insertar : System.Web.UI.Page
16     {
17         PerformanceCounter cpuCounter;
18         PerformanceCounter ramCounter;
19         PerformanceCounter diskCounter;
20         public string path1 = "C:/wamp/reportes/reporteInsercion_DAPPER.txt";
21         public TimeSpan diferencia;
22         public TimeSpan stop;
23         0 referencias
24         protected void Page_Load(object sender, EventArgs e)
25         {
26         }
27
28         0 referencias
29         protected void Button1_Click(object sender, EventArgs e)
30         {
31             cpuCounter = new PerformanceCounter("Processor", "% Processor Time", "_Total");
32             ramCounter = new PerformanceCounter("Memory", "% Committed Bytes In Use");
33             diskCounter = new PerformanceCounter("PhysicalDisk", "% Disk Time", "_Total");
34             TimeSpan dormir;
35         }
36     }
37 }
```

**Ilustración 3. Prototipo DAPPER.**  
Elaboración por: Jayron Silva, Anjelo Minango



```
42 }
43 }
44 direccion = textbox3.text
45 TimeSpan stop;
46 TimeSpan start = new TimeSpan(DateTime.Now.Ticks);
47 while (i < 385)
48 {
49     context.vendedor.Add(ing_ven);
50     context.SaveChanges();
51     DateTime localDate = DateTime.Now;
52     cpuCounter.NextValue();
53     diskCounter.NextValue();
54     ramCounter.NextValue();
55     stop = new TimeSpan(DateTime.Now.Ticks);
56     dormir = TimeSpan.FromMilliseconds(stop.Subtract(start).TotalMilliseconds);
57     if (dormir < segundo)
58     {
59         Label16.Text = Convert.ToString(stop.Subtract(start).TotalMilliseconds);
60         Label17.Text = Convert.ToString(i);
61         diferencia = TimeSpan.FromMilliseconds(segundo.Subtract(dormir).TotalMilliseconds);
62         System.Threading.Thread.Sleep(diferencia);
63         File.AppendAllLines(path1, new String[] { localDate.ToString() + "|" + cpuCounter.NextValue().ToS
64     }
65     }
66     else
67     {
```

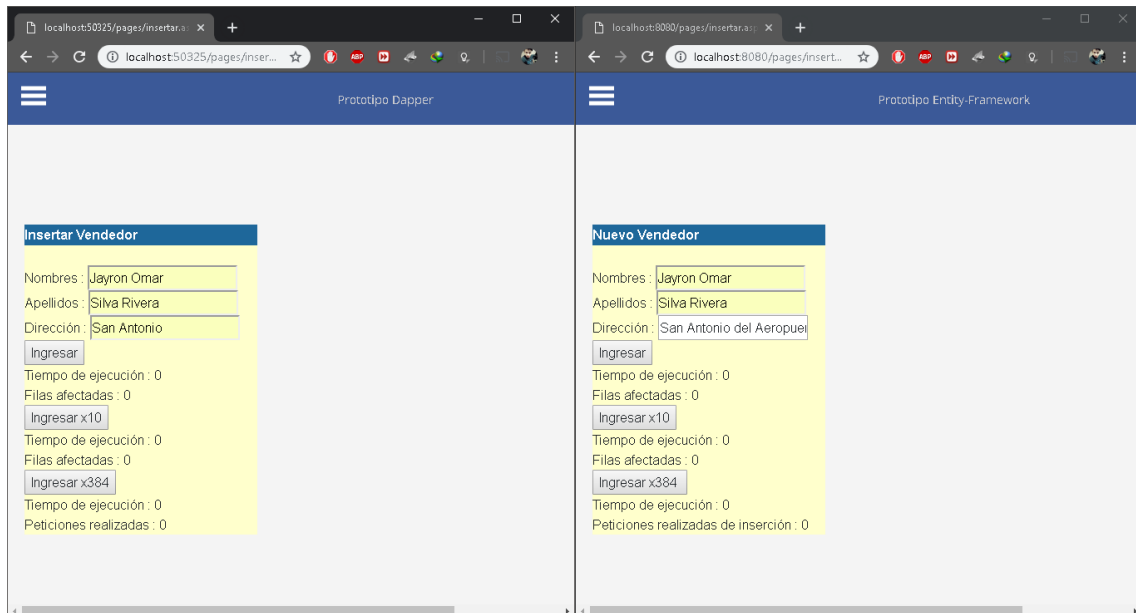
**Ilustración 4. Prototipo ENTITY FRAMEWORK**  
Elaborado por: Jayron Silva, Anjelo Minango



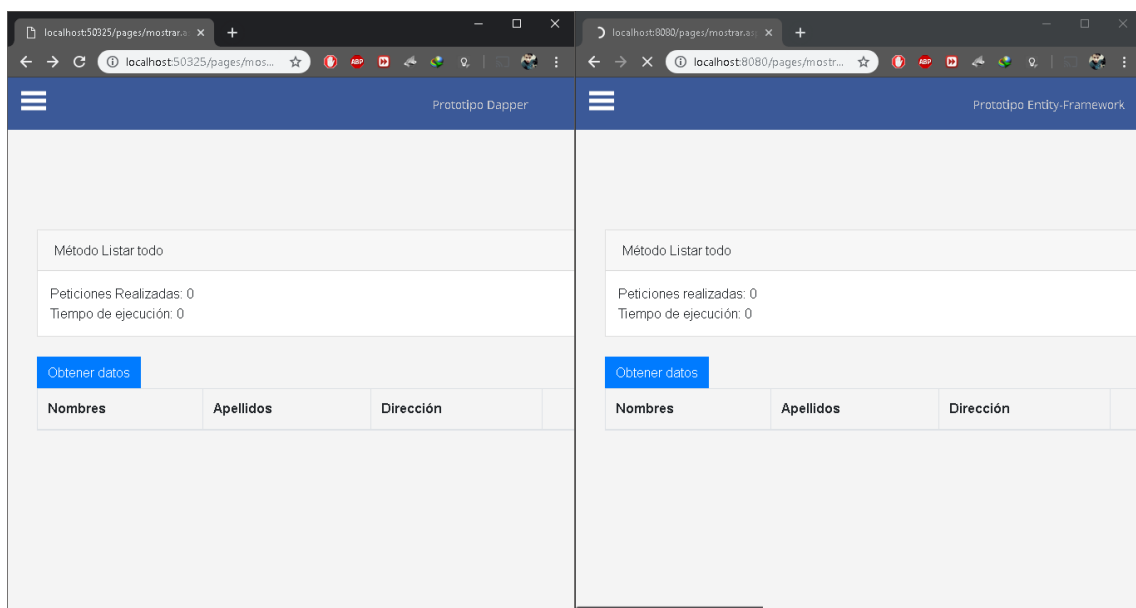
**Ilustración 5. Base de datos de los prototipos**  
Elaborado por: Jayron Silva, Anjelo Minango

## DESCRIPCIÓN DEL ESCENARIO

Se realizó dos prototipos, cada uno de ellos implementado con DAPPER y ENTITY FRAMEWORK respectivamente, con la arquitectura de software 4 capas implementando las funciones básicas de las bases de datos como son: Insertar, mostrar, actualizar y eliminar, para posteriormente realizar un análisis de eficiencia de desempeño según las normas ISO/IEC 25010 descritos anteriormente, de igual forma se creó dos bases de datos con el gestor Postgresql para evitar algún tipo de conflicto.



**Ilustración 6. Escenario 1 prototipos**  
Elaborado por: Jayron Silva, Anjelo Minango



**Ilustración 7. Escenario 2 prototipos**  
Elaborado por: Jayron Silva, Anjelo Minango

## **HERRAMIENTAS DE MEDICIÓN**

Las herramientas de medición permiten evaluar los indicadores de los parámetros que fueron establecidos en base a las Normas ISO/IEC 25010 planteados anteriormente las mismas que fueron obtenidas de desde los prototipos creados desarrollados con DAPPER y ENTITY FRAMEWORK.

Para obtener los datos necesarios se implementó las siguientes herramientas:

**Jmeter:** Es una herramienta de carga diseñada para realizar Pruebas de Rendimiento y Pruebas Funcionales sobre Aplicaciones Web.

Características

- Permite el manejo de datos de entrada para las pruebas.
- Las pruebas que realizan son de forma rápida.
- Permite realizar pruebas de testing a la interfaz gráfica GUI.
- Presenta una interfaz gráfica amigable, al momento en que lanzan los errores.
- Ver de distintas formas los resultados de la ejecución de un test plan (vía listeners)

**TimeSpan:** Mediante programación C# se implementa este método para realizar la captura de Tiempo de respuesta(ms) de los prototipos.

**PerformanceCounter:** Mediante programación C# se implementa este método para realizar la captura de utilización de recursos (%) de los prototipos.

## **RECOLECCIÓN DE DATOS**

Para la recolección de datos se utilizó la herramienta JMeter con el complemento PerfMon obteniendo así el comportamiento temporal y mediante código con TimeSpan para el comportamiento temporal y PerformanceCounter para utilización de recursos y capacidad. Posteriormente se crea un plan de pruebas en base a la muestra obtenida con la fórmula de población infinita con los métodos Insertar, mostrar, actualizar y mostrar. Los datos obtenidos con la herramienta JMeter se ingresa en el software estadístico SPSS, para posteriormente ser analizadas.

## **PRUEBA ESTADÍSTICA**

### **PRUEBA DE NORMALIDAD**

Para el desarrollo de la prueba estadística es necesario conocer la normalidad de los datos para poder elegir una prueba estadística adecuada, para esto utilizó la herramienta IBM SPSS statistics 25, permitiendo conocer el nivel de significancia de los datos.

### **PRUEBA U DE MANN – WHITNEY**

Al comprobar la normalidad de datos se optó por la prueba U de Mann – Whitney, en la cual se estableció un nivel de confianza del 95%, un nivel de significancia del 5% (0,05) con una muestra de 384 datos de los métodos CRUD.

### **UNIDAD DE ANÁLISIS**

La unidad de análisis fueron las 384 peticiones realizadas en cada uno de los prototipos desarrollados con su respectivo ORM por cada método CRUD descrito en el presente trabajo.

Para el desarrollo de este estudio se realizó el análisis de eficiencia del desempeño entre DAPPER Y ENTITY FRAMEWORK específicamente en la capa de acceso a datos de un programa informático, las métricas fueron establecidas por los autores en base a las normas ISO/IEC 25010.

Definida las métricas de evaluación se estableció las herramientas para medir dichos indicadores y demostrar que herramienta ORM es el más apropiado para su implementación en el sistema de buenas prácticas para las empresas turísticas del cantón Riobamba.

Establecidas las herramientas de medición de los prototipos, se procede a realizar la comparativa de ambas tecnologías web.

Con los prototipos se realizó las pruebas necesarias de las tecnologías DAPPER y ENTITY FRAMEWORK, los resultados obtenidos se tabulo los datos para su respectivo análisis y se procede con la demostración de la hipótesis previamente planteada el cual permite seleccionar herramienta adecuada al desarrollo del sistema.

### **POBLACIÓN DE ESTUDIO**

Para la población se consideró las peticiones que los usuarios pueden realizar al sistema desarrollado, siendo este un valor infinito.

## MUESTRA

Al ser tener una población infinita, la muestra se obtuvo mediante la fórmula de muestreo de población no conocida; el método de muestreo es no probabilística (no aleatoria) de tipo intencional. Se optó por este medio al tener una población infinita homogénea con respecto a las características de medición. Ya que se suele tomar muestras cuando es difícil o costosa la observación de todos los elementos de la población estadística como en el presente estudio.

### Ecuación 1: Tamaño de muestra población infinita

$$n(\text{muestra}) = \frac{Z^2 * p * q}{e^2}$$

#### Donde:

**p**= Probabilidad de éxito (0.5)

**q**= Probabilidad de fracaso (1-p)

**q**= (0.5)

**Z**= Nivel de confianza 95% (1.96 Distribución Z-Normal)

**e** = Error de estimación 5%

$$n = \frac{z^2 * p * q}{e^2}$$

$$n = \frac{(1.96^2) * (0.5) * (0.5)}{0.05^2}$$

$$n = \frac{0.9604}{0.0025}$$

$$n = 384.16$$

El tamaño de la muestra es de 384.

## TÉCNICAS DE RECOLECCIÓN DE DATOS

El propósito principal en este apartado es procesar los datos obtenidos de la población objeto de estudio durante esta actividad de campo, y tiene como fin generar resultados, a partir de los cuales se realizará el análisis según los objetivos de investigación realizada.

Como primera fase de investigación se consideró el método experimental, obteniendo información de artículos científicos, libros entre otros, en el cual se distinguen las características de las herramientas y se procede a revisar ordenadamente cada uno de ellos por separado para su implementación en dichos prototipos.

Para la segunda fase del proyecto se consideró utilizar la investigación empírica- aplicada, en donde buscamos la aplicación de las herramientas en situaciones reales obteniendo información para después analizarla, obteniendo así dos prototipos desarrollados con las herramientas DAPPER Y ENTITY FRAMEWORK

Con el desarrollo de los dos prototipos se realizó la evaluación en base a las métricas para la eficiencia de desempeño establecidos en la ISO/IEC 25010 como son:

## COMPORTAMIENTO TEMPORAL

### • TIEMPO DE RESPUESTA (ms)

Como indicador principal tenemos el Tiempo de respuesta(ms) que pretende demostrar la eficiencia de las aplicaciones prototipo evaluando el periodo de tiempo que transcurre al realizar una petición hasta recibir una respuesta en los diferentes métodos de la herramienta.

**Tabla 2.** Comportamiento temporal - Tiempos de respuestas

Tiempo de respuesta(ms)	
Indicador	Descripción
Inserción de datos	Periodo de tiempo que tarda las herramientas DAPPER y ENTITY FRAMEWORK al ingresar datos
Consulta de datos	Periodo de tiempo que tarda las herramientas DAPPER y ENTITY FRAMEWORK al realizar una consulta de datos
Actualización de datos	Periodo de tiempo que tarda las herramientas DAPPER y ENTITY FRAMEWORK al actualizar datos
Eliminación de datos	Periodo de tiempo que tarda las herramientas DAPPER y ENTITY FRAMEWORK al eliminar datos.

**Elaborado por:** Jayron Silva, Anjelo Minango

## UTILIZACIÓN DE RECURSOS (%)

En este apartado tenemos dos indicadores con son:

- **PROCESADOR**

Este parámetro permite mostrar el uso de procesador cuando el software lleva a cabo su función bajo condiciones determinadas.

**Tabla 3.** Utilización de recursos - Procesador

Procesador	
Indicador	Descripción
Uso de CPU	Promedio de CPU utilizado al realizar los métodos de inserción, consulta, actualización y eliminación con las herramientas DAPPER y ENTITY FRAMEWORK en la base de datos.

**Elaborador por:** Jayron Silva, Anjelo Minango

- **MEMORIA RAM**

Este parámetro permite mostrar el uso de memoria RAM cuando el software lleva a cabo su función bajo condiciones determinadas.

**Tabla 4.** Utilización de recursos - RAM

Memoria RAM	
Indicador	Descripción
Memoria RAM	Promedio de memoria RAM utilizado al realizar los métodos de inserción, consulta, actualización y eliminación con las herramientas DAPPER y ENTITY FRAMEWORK en la base de datos.

**Elaborado por:** Jayron Silva, Anjelo Minango

## CAPACIDAD

Para el desarrollo de este apartado hacemos referencia al estado máximo de los recursos a utilizar, en este caso se utilizó: procesador y memoria RAM.

**Tabla 5.** Capacidad CPU, RAM

Capacidad	
Indicador	Descripción
Uso de CPU	CPU máximo utilizado al realizar los métodos de inserción, consulta, actualización y eliminación con las



	herramientas DAPPER y ENTITY FRAMEWORK en la base de datos.
Memoria RAM	Memoria RAM máxima utilizado al realizar los métodos de inserción, consulta, actualización y eliminación con las herramientas DAPPER y ENTITY FRAMEWORK en la base de datos.

**Elaborador por:** Jayron silva, Anjelo Minango

## TÉCNICAS DE ANÁLISIS

- **FUENTE DE INFORMACIÓN**

**Fuente Primaria.** A más de la información recolectada de las herramientas ORM en artículos científicos, se obtendrá información basándose en la observación directa del objeto de estudio en su área.

- **TÉCNICA E INSTRUMENTOS DE RECOLECCIÓN DE DATOS**

**Técnica documental.** - Mediante esta técnica se recopilará toda la información de fuentes primarias y secundarias que permitirá enunciar y desarrollar teorías que sustentarán el marco teórico en el cual se basará el análisis e interpretación del proyecto de investigación.

**La observación.** Esta técnica se considera fundamental en este proceso de investigación, ya que nos permitirá observar el objeto de estudio en funcionamiento permitiendo obtener información para después analizarla.

## CAPÍTULO IV.

### RESULTADOS

#### DEFINICIÓN DE LAS MÉTRICAS DE EVALUACIÓN

Para realizar el análisis comparativo de eficiencia de desempeño de las herramientas DAPPER y ENTITY FRAMEWORK se estableció métricas de evaluación, los mismo que han sido seleccionados por los autores del presente proyecto, en base a las normas ISO/IEC 25010.

Las normas ISO/IEC 25010 establece un modelo de calidad del producto de software que lo divide en ocho características, este proyecto se enfocará específicamente en la característica de eficiencia de desempeño, el mismo que estable subcaracterísticas que lo estableceremos como métricas de evaluación, para el presente estudio los autores han considerado las siguientes métricas como son:

- Comportamiento temporal: Tiempos de respuestas de las funciones básicas en una base de datos (Crear, Leer, Actualizar y Borrar).
- Utilización de recursos: Cantidad y tipos de recursos utilizados cuando el software cumple su acción.
- Capacidad: Grado máximo de los recursos cuando el software cumple una acción específica.

**Tabla 6.** Parámetros de evaluación

Métrica	Indicador	Definición
Comportamiento temporal	Tiempo de respuesta(ms) de los métodos CRUD	Periodo de tiempo que transcurre desde que se envía una petición hasta obtiene una respuesta.
Utilización de recursos	Procesador	Porcentaje de uso de CPU del proceso.
	Memoria RAM	Cantidad de memoria utilizada.
Capacidad	Procesador	Porcentaje máximo de uso de CPU.
	Memoria RAM	Cantidad de memoria máxima utilizada.

**Elaborado por:** Jayron Silva, Anjelo Minango

**ANÁLISIS COMPARATIVO DE LA EFICIENCIA DE DESEMPEÑO MEDIANTE UN PROTOTIPO DESARROLLADO CON DAPPER FRENTE A OTRO DESARROLLADO CON ENTITY FRAMEWORK EN ASP.NET C#  
RESULTADOS**

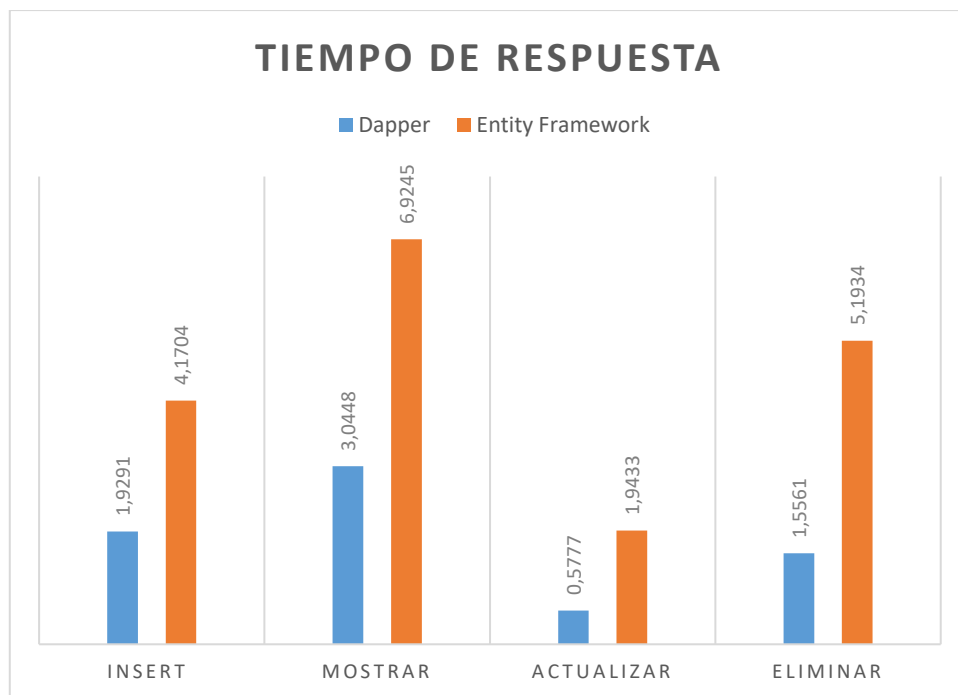
**ANÁLISIS DE INDICADORES**

**TIEMPO DE RESPUESTA (ms)**

**Tabla 7.** Tiempo de respuesta(ms) DAPPER y ENTITY FRAMEWORK

	Insertar	Mostrar	Actualizar	Eliminar
DAPPER	1,9291	3,0448	0,5777	1,5561
ENTITY FRAMEWORK	4,1703	6,9245	1,9433	5,1934

**Fuente:** Jayron Silva, Anjelo Minango



**Ilustración 8.** Tiempo de respuesta(ms) DAPPER y ENTITY FRAMEWORK

**Fuente:** Jayron Silva, Anjelo Minango

En la ilustración número 8 muestra los resultados de los tiempos de respuesta de las herramientas DAPPER vs ENTITY FRAMEWORK:

Método insertar: DAPPER presenta un tiempo de respuesta de 1,9291 ms y ENTITY FRAMEWORK de 4,1703 ms, concluyendo que DAPPER provee menor tiempo de respuesta en el método insertar.

Método mostrar: DAPPER presenta un tiempo de respuesta de 3,0448 ms y ENTITY FRAMEWORK de 6,9245 ms, concluyendo que DAPPER provee menor tiempo de respuesta en el método mostrar.

Método actualizar: DAPPER presenta un tiempo de respuesta de 0,5777 ms y ENTITY FRAMEWORK de 1,9433 ms, concluyendo que DAPPER provee menor tiempo de respuesta en el método actualizar.

Método eliminar: DAPPER presenta un tiempo de respuesta de 1,5561 ms y ENTITY FRAMEWORK de 5,1944 ms, concluyendo que DAPPER provee menor tiempo de respuesta en el método Eliminar.

### UTILIZACIÓN DE RECURSOS (%)

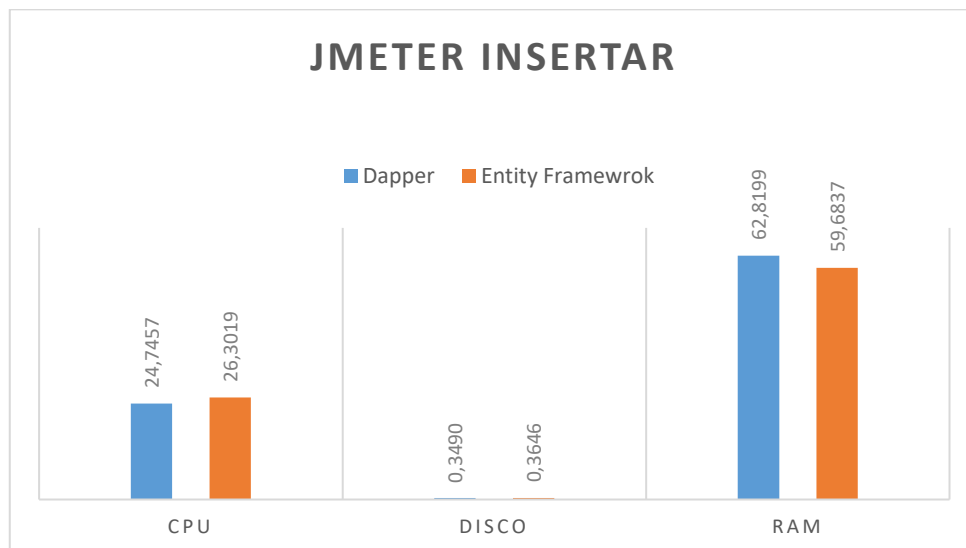
### HERRAMIENTA DE RECOLECCIÓN DE DATOS JMETER

### INSERTAR

**Tabla 8.** Jmeter-Utilización de recursos-Insertar-DAPPER vs ENTITY FRAMEWORK

Insertar Jmeter			
	CPU	Disco	RAM
DAPPER	24,75	0,3490	62,8199
ENTITY FRAMEWORK	26,3019	0,3646	59,6837

Fuente: Jayron Silva, Anjelo Minango



**Ilustración 9.** Jmeter-Utilización de recursos-Insertar- DAPPER vs ENTITY FRAMEWORK

Fuente: Jayron Silva, Anjelo Minango

En la ilustración número 9 muestra los resultados de la utilización de recursos obtenidos con la herramienta Jmeter del método insertar de las herramientas DAPPER vs ENTITY FRAMEWORK:

CPU: DAPPER ocupa el 24,75% y ENTITY FRAMEWORK un 26,30% según la herramienta Jmeter, concluyendo que DAPPER ocupa menos porcentaje de recursos de CPU en el método Insertar.

Disco: DAPPER ocupa el 0,35% y ENTITY FRAMEWORK un 0,36% según la herramienta Jmeter, concluyendo que DAPPER ocupa menos porcentaje de recursos en disco en el método Insertar.

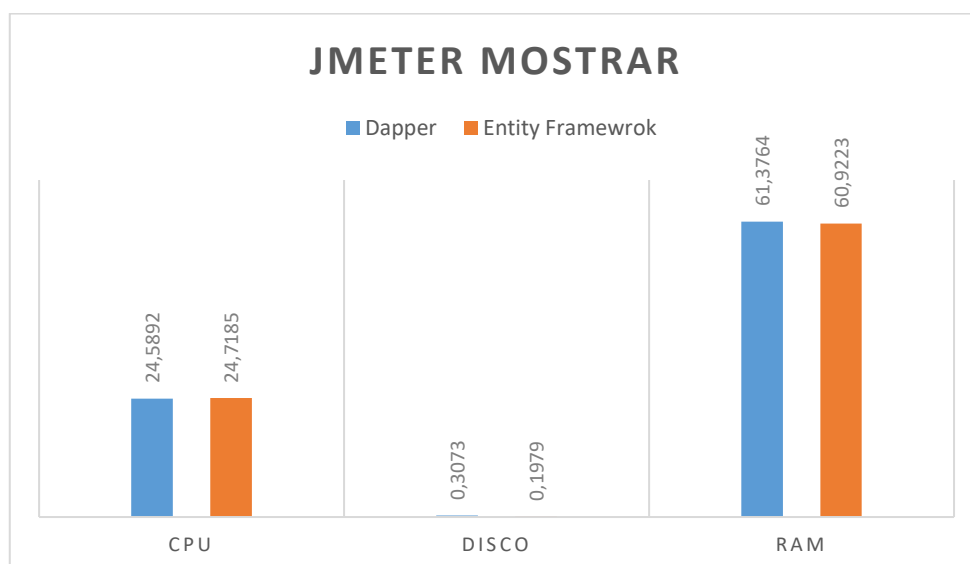
RAM: DAPPER ocupa el 62,82% y ENTITY FRAMEWORK un 59,68% según la herramienta Jmeter, concluyendo que ENTITY FRAMEWORK ocupa menos porcentaje de recursos en memoria RAM.

## MOSTRAR

**Tabla 9.** Jmeter-Utilización de recursos-Mostrar-DAPPER vs ENTITY FRAMEWORK

Mostrar			
	CPU	Disco	RAM
DAPPER	24,58916	0,3073	61,3764
ENTITY FRAMEWORK	24,7185	0,1979	60,9223

**Fuente:** Jayron Silva, Anjelo Minango



**Ilustración 10.** Jmeter-Utilización de recursos- Mostrar- DAPPER vs ENTITY FRAMEWORK

**Fuente:** Jayron Silva, Anjelo Minango

En la ilustración número 10 muestra los resultados de la utilización de recursos obtenidos con la herramienta Jmeter del método mostrar de las herramientas DAPPER vs ENTITY FRAMEWORK:

CPU: DAPPER ocupa el 24,59% y ENTITY FRAMEWORK un 24,72% según la herramienta Jmeter, concluyendo que DAPPER ocupa menos porcentaje de recursos de CPU en el método mostrar.

Disco: DAPPER ocupa el 0,31% y ENTITY FRAMEWORK un 0,20% según la herramienta Jmeter, concluyendo que ENTITY FRAMEWORK ocupa menos porcentaje de recursos en disco.

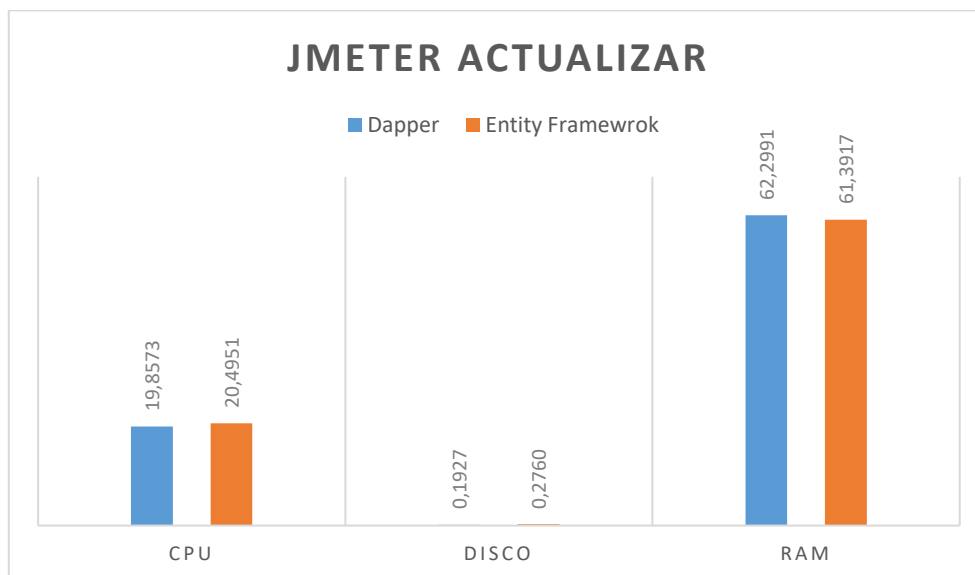
RAM: DAPPER ocupa el 61,38% y ENTITY FRAMEWORK un 60,92% según la herramienta Jmeter, concluyendo que ENTITY FRAMEWORK ocupa menos porcentaje de recursos en memoria RAM.

## ACTUALIZAR

**Tabla 10.** Jmeter-Utilización de recursos- Actualizar- DAPPER vs ENTITY FRAMEWORK

Actualizar			
	CPU	Disco	RAM
DAPPER	19,85734	0,1927	62,2990
ENTITY FRAMEWORK	20,4951	0,2760	61,3917

**Fuente:** Jayron Silva, Anjelo Minango



**Ilustración 11.** Jmeter-Utilización de recursos-Actualizar-DAPPER vs ENTITY FRAMEWORK

**Fuente:** Jayron Silva – Anjelo Minango

En la ilustración número 11 muestra los resultados de la utilización de recursos obtenidos con la herramienta Jmeter del método actualizar de las herramientas DAPPER vs ENTITY FRAMEWORK:

CPU: DAPPER ocupa el 19,86% y ENTITY FRAMEWORK un 20,50% según la herramienta Jmeter, concluyendo que DAPPER ocupa menos porcentaje de recursos de CPU en el método actualizar.

Disco: DAPPER ocupa el 0,19% y ENTITY FRAMEWORK un 0,28% según la herramienta Jmeter, concluyendo que DAPPER ocupa menos porcentaje de recursos en disco en el método actualizar.

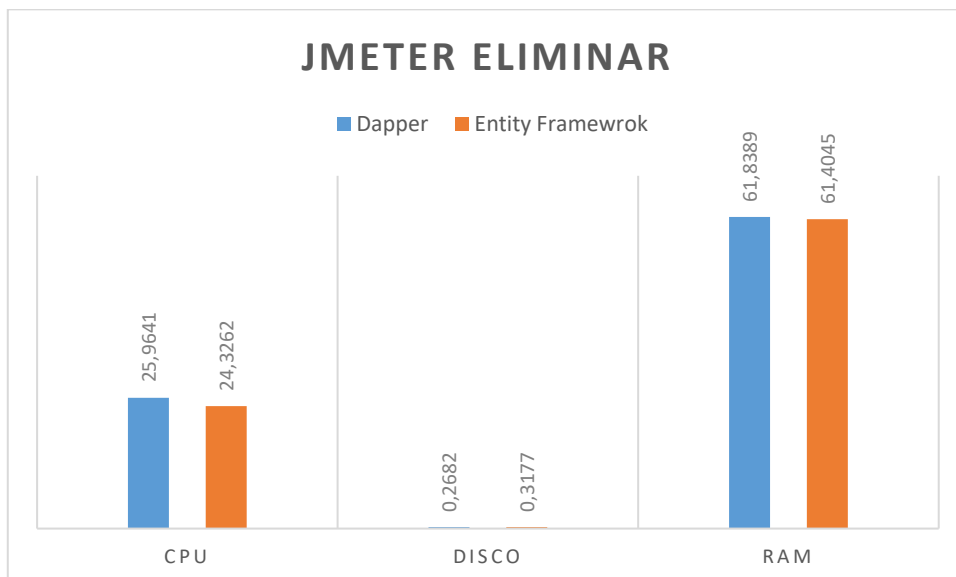
RAM: DAPPER ocupa el 62,30% y ENTITY FRAMEWORK un 61,39% según la herramienta Jmeter, concluyendo que ENTITY FRAMEWORK ocupa menos porcentaje de recursos en memoria RAM en el método actualizar.

### ELIMINAR

**Tabla 11.** Jmeter-Utilización de recursos-Eliminar-DAPPER vs ENTITY FRAMEWORK

Eliminar			
	CPU	Disco	RAM
DAPPER	25,96408	0,26823	61,8389
ENTITY FRAMEWORK	24,3262	0,3177	61,4045

Elaborado por: Jayron Silva, Anjelo Minango



**Ilustración 12.** Jmeter-Utilización de recursos-Eliminar-DAPPER vs ENTITY FRAMEWORK

Fuente: Jayron Silva – Anjelo Minango

En la ilustración número 12 muestra los resultados de la utilización de recursos obtenidos con la herramienta Jmeter del método eliminar de las herramientas DAPPER vs ENTITY FRAMEWORK:

CPU: DAPPER ocupa el 25,96% y ENTITY FRAMEWORK un 24,33% según la herramienta Jmeter, concluyendo que ENTITY FRAMEWORK ocupa menos porcentaje de recursos de CPU en el método eliminar.

Disco: DAPPER ocupa el 0,27% y ENTITY FRAMEWORK un 0,32% según la herramienta Jmeter, concluyendo que DAPPER ocupa menos porcentaje de recursos en disco en el método eliminar.

RAM: DAPPER ocupa el 61,84% y ENTITY FRAMEWORK un 61,40% según la herramienta Jmeter, concluyendo que ENTITY FRAMEWORK ocupa menos porcentaje de recursos en memoria RAM.

## HERRAMIENTA DE RECOLECCIÓN DE DATOS LIBRERÍA C# VISUAL STUDIO

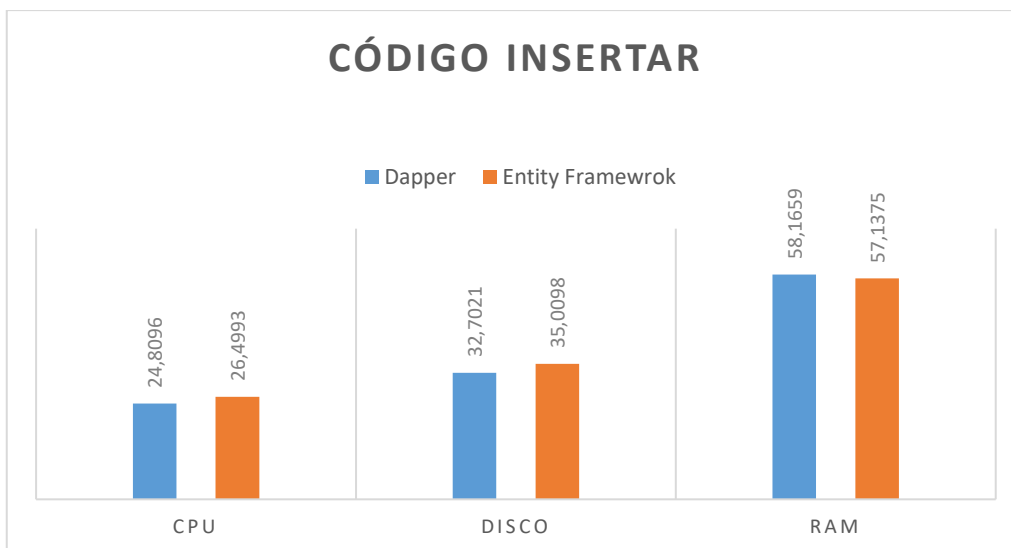
### INSERTAR

**Tabla 12.** Código-Tiempo de respuesta(ms)-Insertar-DAPPER vs ENTITY FRAMEWORK

<b>Insertar Código</b>			
	<b>CPU</b>	<b>Disco</b>	<b>RAM</b>
<b>DAPPER</b>	24,8096	32,7021	58,1659
<b>ENTITY FRAMEWORK</b>	26,4993	35,0098	57,1375

**Fuente:** Jayron Silva, Anjelo Minango





**Ilustración 13.** Código-Tiempo de respuesta(ms)-Insertar-DAPPER vs ENTITY FRAMEWORK

**Elaborado por:** Jayron Silva, Anjelo Minango

En la ilustración número 13 muestra los resultados de la utilización de recursos obtenidos con la herramienta de Visual Studio del método insertar de las herramientas DAPPER vs ENTITY FRAMEWORK:

CPU: DAPPER ocupa el 24,81% y ENTITY FRAMEWORK un 26,50% según la herramienta de Visual Studio, concluyendo que DAPPER ocupa menos porcentaje de recursos de CPU en el método insertar.

Disco: DAPPER ocupa el 32,70% y ENTITY FRAMEWORK un 35,01% según la herramienta de Visual Studio, concluyendo que DAPPER ocupa menos porcentaje de recursos en disco en el método insertar.

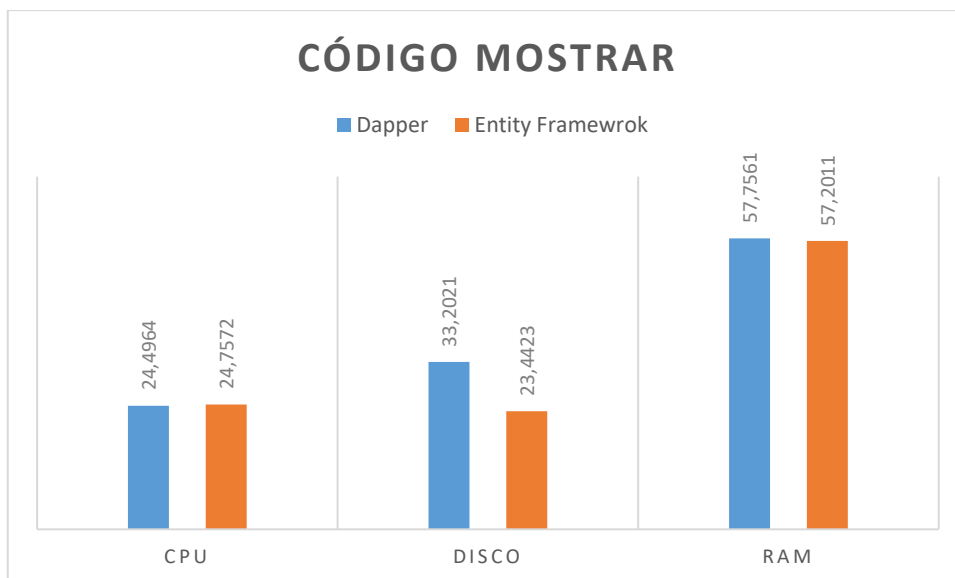
RAM: DAPPER ocupa el 58,17% y ENTITY FRAMEWORK un 57,14% según la herramienta de Visual Studio, concluyendo que ENTITY FRAMEWORK ocupa menos porcentaje de recursos en memoria RAM en el método insertar.

## MOSTRAR

**Tabla 13.** Código-Tiempo de respuesta(ms)-Mostrar-DAPPER vs ENTITY FRAMEWORK

Mostrar			
	CPU	Disco	RAM
DAPPER	24,49641	33,2021	57,7561
ENTITY FRAMEWORK	24,7572	23,4423	57,2011

**Fuente:** Jayron Silva, Anjelo Minango



**Ilustración 14.** Código-Utilización de recursos- Mostrar-DAPPER vs ENTITY FRAMEWORK

**Fuente:** Jayron Silva, Anjelo Minango

En la ilustración número 14 muestra los resultados de la utilización de recursos obtenidos con la herramienta de Visual Studio del método mostrar de las herramientas DAPPER vs ENTITY FRAMEWORK:

CPU: DAPPER ocupa el 24,50% y ENTITY FRAMEWORK un 24,76% según la herramienta de Visual Studio, concluyendo que DAPPER ocupa menos porcentaje de recursos de CPU en el método mostrar.

Disco: DAPPER ocupa el 33,20% y ENTITY FRAMEWORK un 23,44% según la herramienta de Visual Studio, concluyendo que ENTITY FRAMEWORK ocupa menos porcentaje de recursos en disco en el método mostrar.

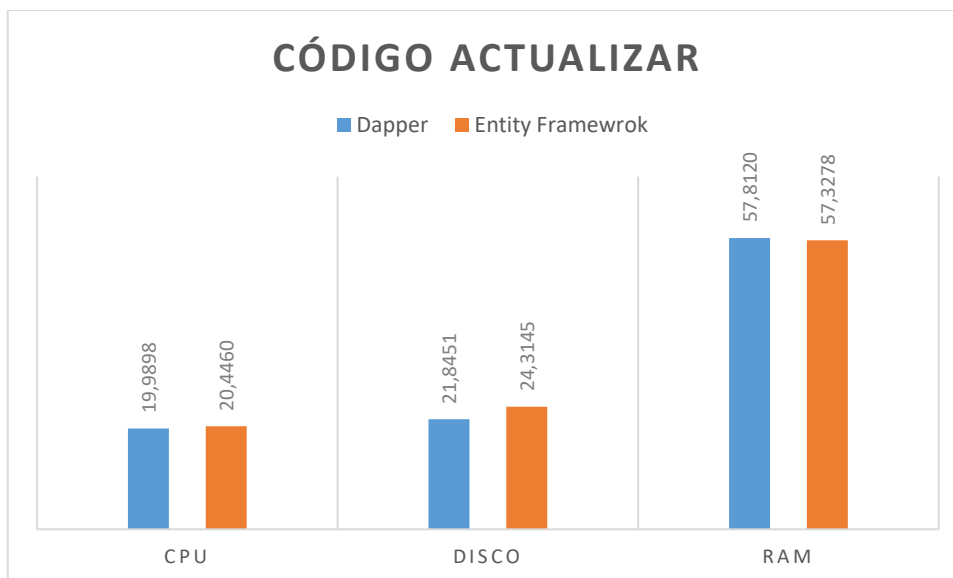
RAM: DAPPER ocupa el 57,76% y ENTITY FRAMEWORK un 57,20% según la herramienta de Visual Studio, concluyendo que ENTITY FRAMEWORK ocupa menos porcentaje de recursos en memoria RAM en el método mostrar.

## ACTUALIZAR

**Tabla 14.** Código-Utilización de recursos-Actualizar-DAPPER vs ENTITY FRAMEWORK

Actualizar			
	CPU	Disco	RAM
DAPPER	19,9898	21,8451	57,8120
ENTITY FRAMEWORK	20,4460	24,3145	57,3278

**Fuente:** Jayron Silva, Anjelo Minango



**Ilustración 15.** Código-Utilización de recursos-Actualizar-DAPPER vs ENTITY FRAMEWORK

**Fuente:** Jayron Silva, Anjelo Minango

En la ilustración número 15 muestra los resultados de la utilización de recursos obtenidos con la herramienta de Visual Studio del método actualizar de las herramientas DAPPER vs ENTITY FRAMEWORK:

CPU: DAPPER ocupa el 19,99% y ENTITY FRAMEWORK un 20,45% según la herramienta de Visual Studio, concluyendo que DAPPER ocupa menos porcentaje de recursos de CPU en el método actualizar.

Disco: DAPPER ocupa el 21,85% y ENTITY FRAMEWORK un 24,31% según la herramienta de Visual Studio, concluyendo que DAPPER ocupa menos porcentaje de recursos en disco en el método actualizar.

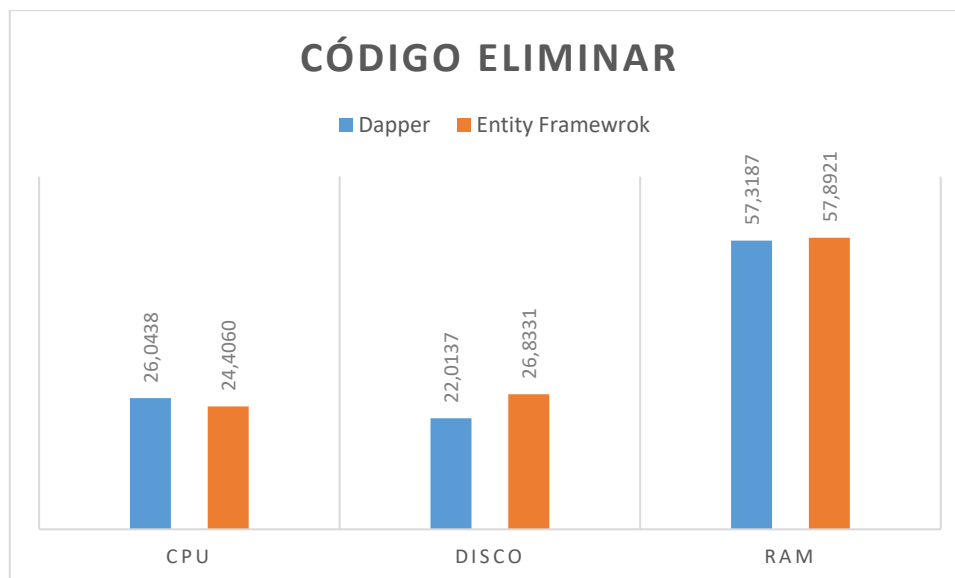
RAM: DAPPER ocupa el 57,81% y ENTITY FRAMEWORK un 57,33% según la herramienta de Visual Studio, concluyendo que ENTITY FRAMEWORK ocupa menos porcentaje de recursos en memoria RAM en el método actualizar.

## ELIMINAR

**Tabla 15.** Código-Utilización de recursos-Eliminar-DAPPER vs ENTITY FRAMEWORK

Eliminar			
	CPU	Disco	RAM
DAPPER	26,0438	22,0137	57,3187
ENTITY FRAMEWORK	24,4060	26,8331	57,8921

**Fuente:** Jayron Silva, Anjelo Minango



**Ilustración 16.** Código-Utilización de recursos-Eliminar-DAPPER vs ENTITY FRAMEWORK

**Elaborado por:** Jayron Silva, Anjelo Minango

En la ilustración número 16 muestra los resultados del uso de recursos obtenidos con la herramienta de Visual Studio del método eliminar de las herramientas DAPPER vs ENTITY FRAMEWORK:

CPU: DAPPER ocupa el 26,04% y ENTITY FRAMEWORK un 24,41% según la herramienta de Visual Studio, concluyendo que ENTITY FRAMEWORK ocupa menos porcentaje de recursos de CPU.

Disco: DAPPER ocupa el 22,01% y ENTITY FRAMEWORK un 26,83% según la herramienta de Visual Studio, concluyendo que DAPPER ocupa menos porcentaje de recursos en disco.

RAM: DAPPER ocupa el 57,32% y ENTITY FRAMEWORK un 57,89% según la herramienta de Visual Studio, concluyendo que DAPPER ocupa menos porcentaje de recursos en memoria RAM.

### PRUEBA DE NORMALIDAD TIEMPOS DE EJECUCIÓN

Para que exista normalidad de datos el valor p(nivel de significancia) debe ser mayor a 0,05.

**Tabla 16.** Prueba Normalidad - Tiempo de ejecución

Tiempos de respuesta					
Método	ORM	Datos	Nivel de Significancia	Nivel de comparación	Normalidad
Insertar	DAPPER	384	0,000	0,05	No
	ENTITY F	384	0,000	0,05	No
Mostrar	DAPPER	384	0,000	0,05	No

	ENTITY F	384	0,000	0,05	No
Actualizar	DAPPER	384	0,000	0,05	No
	ENTITY F	384	0,000	0,05	No
Eliminar	DAPPER	384	0,000	0,05	No
	ENTITY F	384	0,000	0,05	No

**Elaborador por:** Jayron Silva, Anjelo Minango

## PRUEBA DE NORMALIDAD UTILIZACIÓN DE RECURSOS

**Tabla 17.** Prueba de normalidad - Utilización de recursos

Utilización de recursos							
Método	Herramienta	ORM	Recursos	Datos	Nivel de significancia	Error esperado	Cumple Normalidad
Insertar	Jmeter	DAPPER	CPU	384	0,000	0,05	No
			Disco	384	0,000	0,05	No
			RAM	384	0,000	0,05	No
		ENTITY F	CPU	384	0,000	0,05	No
			Disco	384	0,000	0,05	No
			RAM	384	0,000	0,05	No
	Código	DAPPER	CPU	384	0,000	0,05	No
			Disco	384	0,000	0,05	No
			RAM	384	0,000	0,05	No
		ENTITY F	CPU	384	0,000	0,05	No
			Disco	384	0,000	0,05	No
			RAM	384	0,000	0,05	No
Mostrar	Jmeter	DAPPER	CPU	384	0,000	0,05	No
			Disco	384	0,000	0,05	No
			RAM	384	0,000	0,05	No
		ENTITY F	CPU	384	0,000	0,05	No
			Disco	384	0,000	0,05	No
			RAM	384	0,000	0,05	No
	Código	DAPPER	CPU	384	0,000	0,05	No
			Disco	384	0,000	0,05	No
			RAM	384	0,000	0,05	No
		ENTITY F	CPU	384	0,000	0,05	No
			Disco	384	0,000	0,05	No
			RAM	384	0,000	0,05	No
Actualizar	Jmeter	DAPPER	CPU	384	0,000	0,05	No
			Disco	384	0,000	0,05	No
			RAM	384	0,000	0,05	No
		ENTITY F	CPU	384	0,000	0,05	No
			Disco	384	0,000	0,05	No
			RAM	384	0,000	0,05	No
	Código	DAPPER	CPU	384	0,000	0,05	No
			Disco	384	0,000	0,05	No

			RAM	384	0,000	0,05	No
		ENTITY F	CPU	384	0,000	0,05	No
			Disco	384	0,000	0,05	No
			RAM	384	0,000	0,05	No
Eliminar	Jmeter	DAPPER	CPU	384	0,000	0,05	No
			Disco	384	0,000	0,05	No
			RAM	384	0,000	0,05	No
		ENTITY F	CPU	384	0,000	0,05	No
			Disco	384	0,000	0,05	No
			RAM	384	0,000	0,05	No
	Código	DAPPER	CPU	384	0,000	0,05	No
			Disco	384	0,000	0,05	No
			RAM	384	0,000	0,05	No
		ENTITY F	CPU	384	0,000	0,05	No
			Disco	384	0,000	0,05	No
			RAM	384	0,000	0,05	No

Elaborado por: Jayron Silva, Anjelo Minango

## COMPROBACIÓN DE HIPÓTESIS

### HIPÓTESIS

$H_0$  = No existe una diferencia del desempeño entre DAPPER y ENTITY FRAMEWORK.

$$H_0: Mx = My$$

$H_a$  = Existe una diferencia de eficiencia de desempeño entre DAPPER y ENTITY FRAMEWORK.

$$H_a: Mx \neq My$$

### CUADRO PRUEBA U DE MANN WHITNEY

Al no tener normalidad de datos, se necesario elegir una prueba estadística no paramétrica para la prueba de hipótesis en este caso U de Mann Whitney

### TIEMPOS DE RESPUESTA

**Tabla 18.** Análisis comparativo - Tiempos de respuesta – DAPPER vs ENTITY FRAMEWORK

Tiempos de respuesta					
Método	ORM	Datos	Nivel de Significancia Prueba u de Mann Whitney	Nivel de significancia esperado	Conclusión
Insertar	DAPPER	384	0,000	0,05	Rechaza $H_0$
	ENTITY F				
Mostrar	DAPPER	384	0,000	0,05	Rechaza $H_0$
	ENTITY F				

<b>Actualizar</b>	DAPPER	384	0,000	0,05	Rechaza Ho
	ENTITY F				
<b>Eliminar</b>	DAPPER	384	0,000	0,05	Rechaza Ho
	ENTITY F				

**Elaborado por:** Jayron Silva, Anjelo Minango

## UTILIZACIÓN DE RECURSOS

**Tabla 19.** Análisis comparativo - Utilización de recursos – DAPPER vs ENTITY FRAMEWORK

Utilización de recursos							
Método	Herramienta	ORM	Recurso	Datos	Nivel de Significancia Prueba u de Mann Whitney	Nivel de significancia esperado	Conclusión
Insertar	Jmeter	DAPPER vs ENTITY FRAMEWORK	CPU	384	0	0,05	Rechaza Ho
			Disco	384	0,586	0,05	Acepta Ho
			RAM	384	0	0,05	Rechaza Ho
	Código		CPU	384	0	0,05	Rechaza Ho
			Disco	384	0,08	0,05	Rechaza Ho
			RAM	384	0	0,05	Rechaza Ho
Mostrar	Jmeter	DAPPER vs ENTITY FRAMEWORK	CPU	384	0,208	0,05	Rechaza Ho
			Disco	384	0,025	0,05	Rechaza Ho
			RAM	384	0	0,05	Rechaza Ho
	Código		CPU	384	0,154	0,05	Rechaza Ho
			Disco	384	0,14	0,05	Rechaza Ho
			RAM	384	0	0,05	Rechaza Ho
Actualizar	Jmeter	DAPPER vs ENTITY FRAMEWORK	CPU	384	0	0,05	Rechaza Ho
			Disco	384	0,056	0,05	Rechaza Ho
			RAM	384	0	0,05	Rechaza Ho
	Código		CPU	384	0,001	0,05	Rechaza Ho
			Disco	384	0,595	0,05	Acepta Ho
			RAM	384	0	0,05	Rechaza Ho
Eliminar	Jmeter	DAPPER vs ENTITY FRAMEWORK	CPU	384	0,129	0,05	Rechaza Ho
			Disco	384	0,39	0,05	Rechaza Ho
			RAM	384	0	0,05	Rechaza Ho
	Código		CPU	384	0,189	0,05	Rechaza Ho
			Disco	384	0,772	0,05	Acepta Ho
			RAM	384	0	0,05	Rechaza Ho

**Elaborado por:** Jayron Silva, Anjelo Minango

## CAPACIDAD

### COMPORTAMIENTO TEMPORAL (ms)

**Tabla 20.** Análisis comparativo-Capacidad Tiempo de respuesta(ms) -DAPPER vs ENTITY FRAMEWORK

Capacidad					
Comportamiento Temporal					
Indicador	Método	ORM	Límite	Datos	Menos capacidad de uso
Tiempo de respuesta(ms)	Insertar	DAPPER	Máximo	78,9255	DAPPER
		ENTITY F	Máximo	202,4114	
	Mostrar	DAPPER	Máximo	175,8368	DAPPER
		ENTITY F	Máximo	202,8136	
	Actualizar	DAPPER	Máximo	1,0044	DAPPER
		ENTITY F	Máximo	15,9848	
	Eliminar	DAPPER	Máximo	3,5542	DAPPER
		ENTITY F	Máximo	52,9531	

**Elaborador por:** Jayron Silva, Anjelo Minango

### UTILIZACIÓN DE RECURSOS (%)

**Tabla 21.** Análisis comparativo-Capacidad Utilización de recursos - DAPPER vs ENTITY FRAMEWORK

Capacidad						
Utilización de recursos						
Método	Herramienta	Recurso	ORM	Límite	Datos	Menos capacidad de uso
Insertar	Jmeter	CPU	DAPPER	Máximo	52,451	ENTITY F
			ENTITY F	Máximo	47,684	
		Disco	DAPPER	Máximo	6	DAPPER
			ENTITY F	Máximo	8	
		RAM	DAPPER	Máximo	64,625	ENTITY F
			ENTITY F	Máximo	60,536	
	Código	CPU	DAPPER	Máximo	51,2728	ENTITY F
			ENTITY F	Máximo	51,0292	
		Disco	DAPPER	Máximo	55,18003	ENTITY F
			ENTITY F	Máximo	35,63795	
		RAM	DAPPER	Máximo	58,8534	ENTITY F
			ENTITY F	Máximo	57,6311	
Mostrar	Jmeter	CPU	DAPPER	Máximo	55,971	ENTITY F
			ENTITY F	Máximo	45,331	



		Disco	DAPPER	Máximo	5	ENTITY F	
			ENTITY F	Máximo	4		
		RAM	DAPPER	Máximo	63,055	ENTITY F	
			ENTITY F	Máximo	62,271		
		Código	CPU	DAPPER	Máximo	51,32	ENTITY F
				ENTITY F	Máximo	45,82	
	Disco		DAPPER	Máximo	40,298	ENTITY F	
			ENTITY F	Máximo	28,218		
	RAM		DAPPER	Máximo	58,79	ENTITY F	
			ENTITY F	Máximo	58,01		
	Actualizar	Jmeter	CPU	DAPPER	Máximo	37,027	DAPPER
				ENTITY F	Máximo	43,362	
Disco			DAPPER	Máximo	4	NULL	
			ENTITY F	Máximo	4		
RAM			DAPPER	Máximo	62,907	DAPPER	
			ENTITY F	Máximo	63,252		
Código		CPU	DAPPER	Máximo	37,0444	DAPPER	
			ENTITY F	Máximo	44,8409		
		Disco	DAPPER	Máximo	25,82249	DAPPER	
			ENTITY F	Máximo	43,30443		
		RAM	DAPPER	Máximo	58,072	DAPPER	
			ENTITY F	Máximo	58,1711		
Eliminar	Jmeter	CPU	DAPPER	Máximo	56,752	ENTITY F	
			ENTITY F	Máximo	43,023		
		Disco	DAPPER	Máximo	8	ENTITY F	
			ENTITY F	Máximo	7		
		RAM	DAPPER	Máximo	63,411	DAPPER	
			ENTITY F	Máximo	63,699		
	Código	CPU	DAPPER	Máximo	55,5165	ENTITY F	
			ENTITY F	Máximo	43,4766		
		Disco	DAPPER	Máximo	36,40984	ENTITY F	
			ENTITY F	Máximo	30,39804		
		RAM	DAPPER	Máximo	58,451	DAPPER	
			ENTITY F	Máximo	58,6442		

**Elaborado por:** Jayron Silva, Anjelo Minango

## DIFERENCIA DAPPER vs ENTITY FRAMEWORK

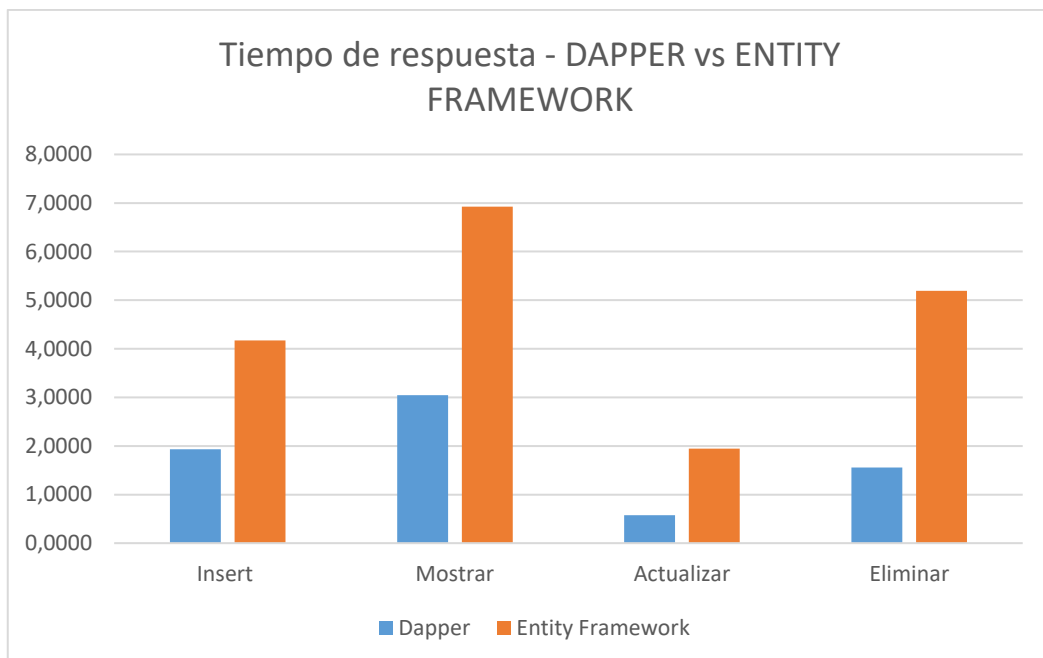
### COMPORTAMIENTO TEMPORAL

#### TIEMPOS DE RESPUESTA (ms)

**Tabla 22.** Comportamiento temporal-Diferencia DAPPER vs ENTITY FRAMEWORK

	Insertar	Mostrar	Actualizar	Eliminar
DAPPER	1,9291	3,0448	0,5777	1,5561
ENTITY FRAMEWORK	4,1704	6,9245	1,9433	5,1934
Diferencia	2,2413	3,8797	1,3656	3,6374

Elaborado por: Jayron Silva, Anjelo Minango



**Ilustración 17.** Tiempo de respuesta - DAPPER vs ENTITY FRAMEWORK

Elaborado por: Jayron Silva, Anjelo Minango

En la ilustración número 17 muestra los resultados de tiempo de respuesta de DAPPER vs ENTITY FRAMEWORK mostrando el tiempo de diferencia con la herramienta de Visual Studio de los métodos CRUD, demostrando así que DAPPER tiene un tiempo promedio bajo en comparación de ENTITY FRAMEWORK.

## USO DE RECURSOS (%)

### CON SYSTEM.DIAGNOSTIC EN EL IDE VISUAL STUDIO

#### MÉTODO INSERTAR

**Tabla 23.** Diferencia de método insertar entre DAPPER vs ENTITY FRAMEWORK

Insertar Código			
	CPU	Disco	RAM
<b>DAPPER</b>	24,8096	32,7021	58,1659
<b>ENTITY FRAMEWORK</b>	26,4993	35,0098	57,1375
<b>Diferencia</b>	1,6897	2,3077	1,0283

**Elaborado por:** Jayron Silva

En la tabla numero 23 muestra los resultados obtenidos con la librería System.Diagnostic en el IDE Visual Studio del uso de recursos del método insertar entre DAPPER vs ENTITY FRAMEWORK demostrando de esta manera que, en:

CPU: DAPPER hace uso de menos recursos con una diferencia de 1,6897%.

Disco: DAPPER hace uso de menos recursos con una diferencia de 2,3077%.

RAM: ENTITY FRAMEWORK hace uno de menos recursos con una diferencia de 1,0283%.

#### MÉTODO MOSTRAR

**Tabla 24.** Diferencia del método mostrar entre DAPPER y ENTITY FRAMEWORK

Mostrar			
	CPU	Disco	RAM
<b>DAPPER</b>	24,4964	33,2021	57,7561
<b>ENTITY FRAMEWORK</b>	24,7572	23,4423	57,2011
<b>Diferencia</b>	0,2608	9,7598	0,5550

**Elaborado por:** Jayron Silva, Anjelo Minango

En la tabla número 24 muestra los resultados obtenidos con la librería System.Diagnostic en el IDE Visual Studio del uso de recursos del método mostrar entre DAPPER vs ENTITY FRAMEWORK demostrando de esta manera que, en:

CPU: DAPPER hace uso de menos recursos con una diferencia de 0,2608%.

DISCO: ENTITY FRAMEWORK hace uno de menos recursos con una diferencia de 9,7598%.

RAM: ENTITY FRAMEWORK hace uno de menos recursos con una diferencia de 0,5550%.

## MÉTODO ACTUALIZAR

**Tabla 25.** Diferencia método actualizar entre DAPPER vs ENTITY FRAMEWORK

<b>Actualizar</b>			
	<b>CPU</b>	<b>Disco</b>	<b>RAM</b>
<b>DAPPER</b>	19,9898	21,8451	57,8120
<b>ENTITY FRAMEWORK</b>	20,4460	24,3145	57,3278
<b>Diferencia</b>	0,4562	2,4693	0,4842

**Elaborado por:** Jayron Silva, Anjelo Minango

En la tabla numero 25 muestra los resultados obtenidos con la librería System.Diagnostic en el IDE Visual Studio del uso de recursos del método actualizar entre DAPPER vs ENTITY FRAMEWORK demostrando de esta manera que, en:

CPU: DAPPER hace uso de menos recursos con una diferencia de 0,4562%.

DISCO: DAPPER hace uno de menos recursos con una diferencia de 2,4693%.

RAM: ENTITY FRAMEWORK hace uno de menos recursos con una diferencia de 0,4842%.

## MÉTODO ELIMINAR

**Tabla 26.** Diferencia método eliminar entre DAPPER vs ENTITY FRAMEWORK

<b>Eliminar</b>			
	<b>CPU</b>	<b>Disco</b>	<b>RAM</b>
<b>DAPPER</b>	26,0438	22,0137	57,3187
<b>ENTITY FRAMEWORK</b>	24,4060	26,8331	57,8921
<b>Diferencia</b>	1,6377	4,8194	0,5734

**Elaborado por:** Jayron Silva, Anjelo Minango

En la tabla número 26 muestra los resultados obtenidos con la librería System.Diagnostic en el IDE Visual Studio del uso de recursos del método eliminar entre DAPPER vs ENTITY FRAMEWORK demostrando de esta manera que, en:

CPU: ENTITY FRAMEWORK hace uso de menos recursos con una diferencia de 1,6377%.

DISCO: DAPPER hace uno de menos recursos con una diferencia de 4,8194%.

RAM: ENTITY FRAMEWORK hace uno de menos recursos con una diferencia de 0,5734%.

## CAPACIDAD (%)

**Tabla 27.** Capacidad máxima de utilización de recursos - DAPPER vs ENTITY FRAMEWORK

Capacidad							
Utilización de recursos							
Método	Herramienta	Recurso	ORM	Límite	Datos	Diferencia	Menos uso de recursos
Insertar	Jmeter	CPU	DAPPER	Máximo	52,451	4,767	ENTITY F
			ENTITY F	Máximo	47,684		
		Disco	DAPPER	Máximo	6	2	DAPPER
			ENTITY F	Máximo	8		
		RAM	DAPPER	Máximo	64,625	4,089	ENTITY F
			ENTITY F	Máximo	60,536		
	Código	CPU	DAPPER	Máximo	51,2728	0,2436	ENTITY F
			ENTITY F	Máximo	51,0292		
		Disco	DAPPER	Máximo	55,18003	19,54208	ENTITY F
			ENTITY F	Máximo	35,63795		
		RAM	DAPPER	Máximo	58,8534	1,2223	ENTITY F
			ENTITY F	Máximo	57,6311		
Mostrar	Jmeter	CPU	DAPPER	Máximo	55,971	10,64	ENTITY F
			ENTITY F	Máximo	45,331		
		Disco	DAPPER	Máximo	5	1	ENTITY F
			ENTITY F	Máximo	4		
		RAM	DAPPER	Máximo	63,055	0,784	ENTITY F
			ENTITY F	Máximo	62,271		
	Código	CPU	DAPPER	Máximo	51,32	5,5	ENTITY F
			ENTITY F	Máximo	45,82		
		Disco	DAPPER	Máximo	40,298	12,08	ENTITY F
			ENTITY F	Máximo	28,218		
		RAM	DAPPER	Máximo	58,79	0,78	ENTITY F
			ENTITY F	Máximo	58,01		

Actualizar	Jmeter	CPU	DAPPER	Máximo	37,027	6,335	DAPPER
			ENTITY F	Máximo	43,362		
		Disco	DAPPER	Máximo	4	0	NULL
			ENTITY F	Máximo	4		
		RAM	DAPPER	Máximo	62,907	0,345	DAPPER
			ENTITY F	Máximo	63,252		
	Código	CPU	DAPPER	Máximo	37,0444	7,7965	DAPPER
			ENTITY F	Máximo	44,8409		
		Disco	DAPPER	Máximo	25,82249	17,48194	ENTITY F
			ENTITY F	Máximo	43,30443		
		RAM	DAPPER	Máximo	58,072	0,0991	DAPPER
			ENTITY F	Máximo	58,1711		
Eliminar	Jmeter	CPU	DAPPER	Máximo	56,752	13,729	ENTITY F
			ENTITY F	Máximo	43,023		
		Disco	DAPPER	Máximo	8	1	ENTITY F
			ENTITY F	Máximo	7		
		RAM	DAPPER	Máximo	63,411	0,288	DAPPER
			ENTITY F	Máximo	63,699		
	Código	CPU	DAPPER	Máximo	55,5165	12,0399	ENTITY F
			ENTITY F	Máximo	43,4766		
		Disco	DAPPER	Máximo	36,40984	6,0118	ENTITY F
			ENTITY F	Máximo	30,39804		
		RAM	DAPPER	Máximo	58,451	0,1932	DAPPER
			ENTITY F	Máximo	58,6442		

**Elaborado por:** Jayron Silva, Anjelo Minango

En la tabla número 27 muestra los resultados de la capacidad máxima de utilización de recursos de DAPPER vs ENTITY FRAMEWORK mostrando en porcentajes con la librería System.Diagnostic en el IDE Visual Studio de los métodos CRUD, demostrando así que DAPPER y ENTITY FRAMEWORK hacen uso similar, pero ENTITY FRAMEWORK hace menos uso de capacidad máxima en recursos.

## **SISTEMA DE BUENAS PRÁCTICAS PARA LAS EMPRESAS TURÍSTICAS DE RIOBAMBA, UTILIZANDO EL ORM CON MEJOR EFICIENCIA DE DESEMPEÑO EN LA CAPA DE ACCESO A DATOS SEGÚN EL ANÁLISIS COMPARATIVO.**

Al concluir el análisis comparativo de las herramientas DAPPER vs ENTITY FRAMEWORK con respecto a la eficiencia de desempeño, es necesario seleccionar la herramienta adecuada a los requerimientos del aplicativo web.

### **PLANIFICACIÓN Y ESPECIFICACIÓN DE REQUISITOS**

La planificación y especificación de requisitos se lo realizar con el objetivo de determinar las necesidades del usuario y establecer un cronograma de trabajo los mismo que fueron establecidos con el grupo de trabajo de investigación.



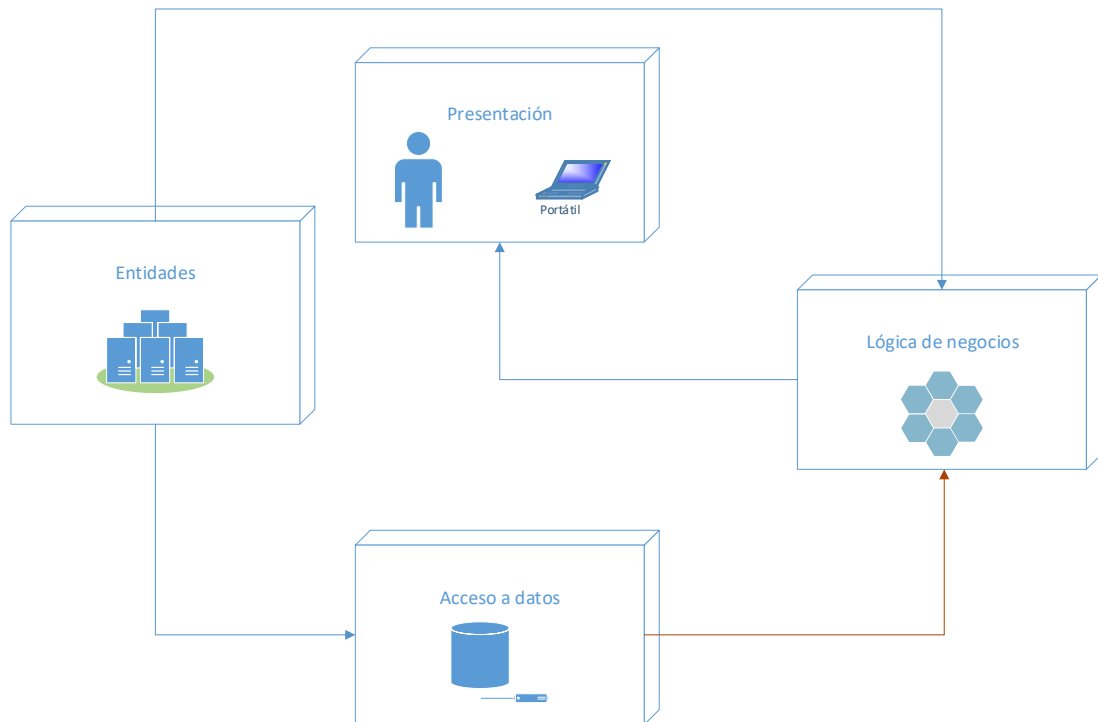
**Ilustración 18.** Reunión grupo de investigación  
**Fuente:** Jayron Silva, Anjelo Minango

### **DISEÑO DE SOFTWARE**

La aplicación Web sistema de buenas prácticas para las empresas turísticas de Riobamba se desarrolló en ASP.NET con el lenguaje de programación C# bajo la arquitectura 4 capas como son:

- Capa de Presentación: Es el diseño principal en el cual el usuario puede visualizar la información solicitada.
- Capa acceso a datos: Es la encargada de acceder a los datos, la misma que está formada por una o dos gestores de base datos.

- Lógica de negocios: Su función principal es atender las peticiones de los usuarios para enviar las respuestas necesarias tras el proceso.
- Entidades: Posee los atributos o cualidades que posee un objeto de datos.



**Ilustración 19.** Arquitectura de software  
**Elaborado por:** Jayron Silva, Anjelo Minango

## DESARROLLO DE SOFTWARE

Con el desarrollo de esta investigación se evaluó las herramientas ORM ya mencionadas, determinando de esta manera que herramienta ofrece mejor eficiencia de desempeño en el atributo de tiempo de respuesta en la capa de abstracción de datos motivo por el cual se optó por utilizar DAPPER siendo un requerimiento por parte de los usuarios un sistema eficiente.

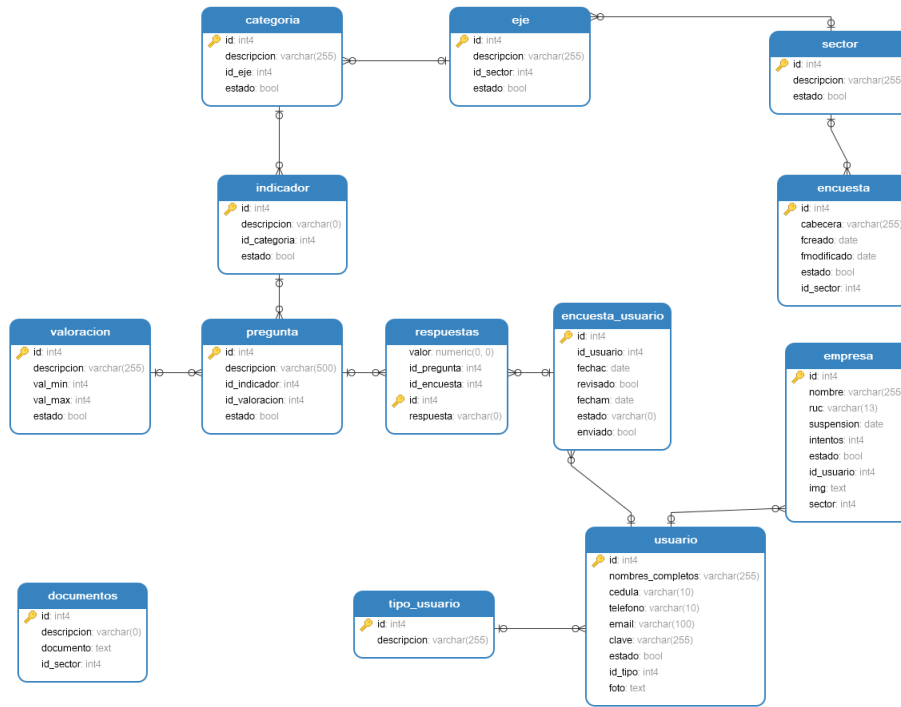


**Ilustración 20.** Página web Buenas Prácticas  
**Fuente:** <http://190.15.135.35/Cuestionario/views/pages/Index.aspx>



## ESQUEMA DE BASE DE DATOS

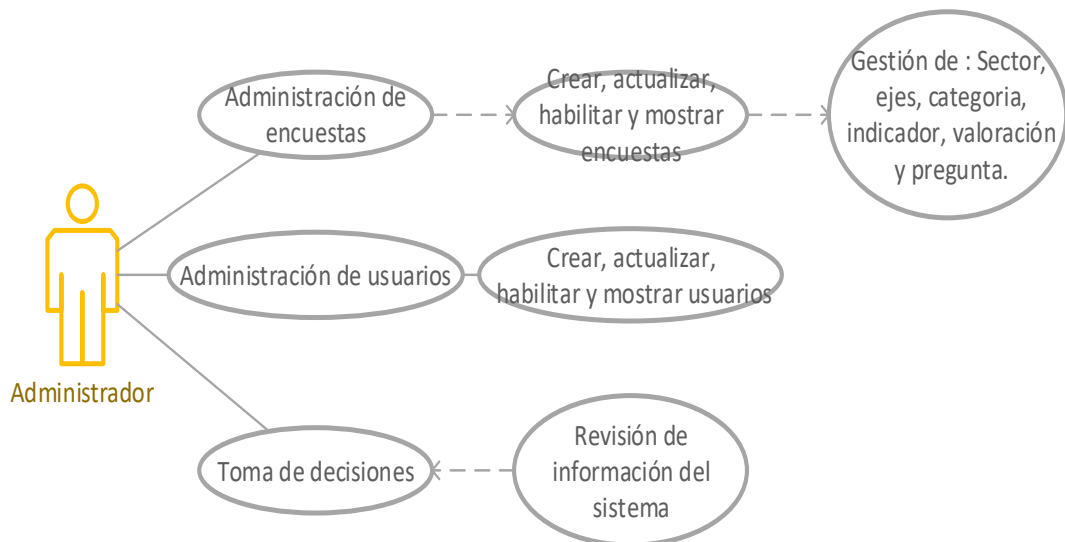
En este apartado se muestra un bosquejo de la base de datos que se utilizó para el desarrollo del sistema, el mismo que se será implementado en el servidor.



**Ilustración 21.** Esquema de base de datos  
Elaborado por: Jayron Silva, Anjelo Minango

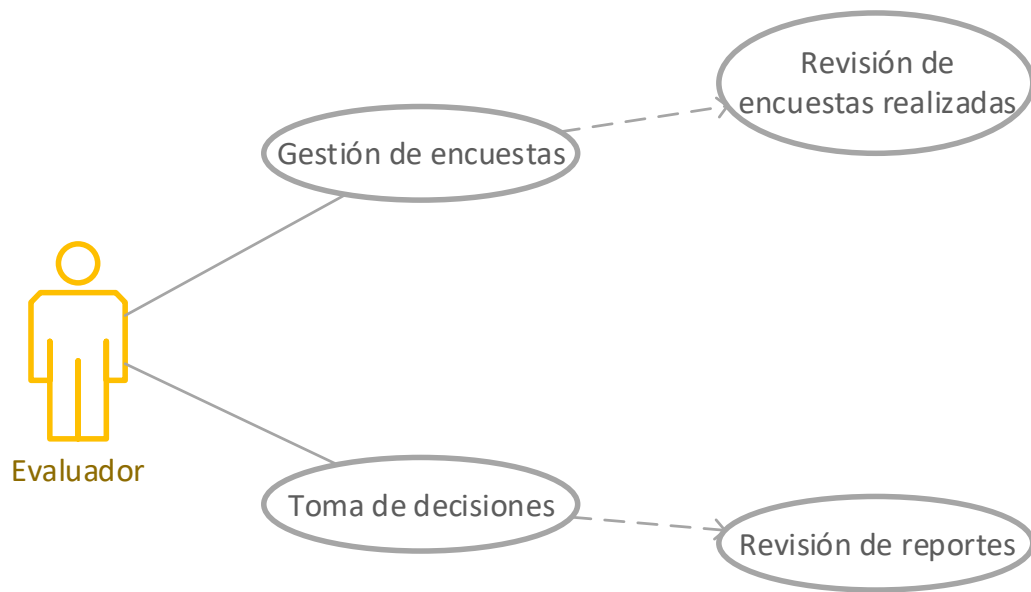
## DIAGRAMAS DE CASO DE USO

### USUARIO ADMINISTRADOR



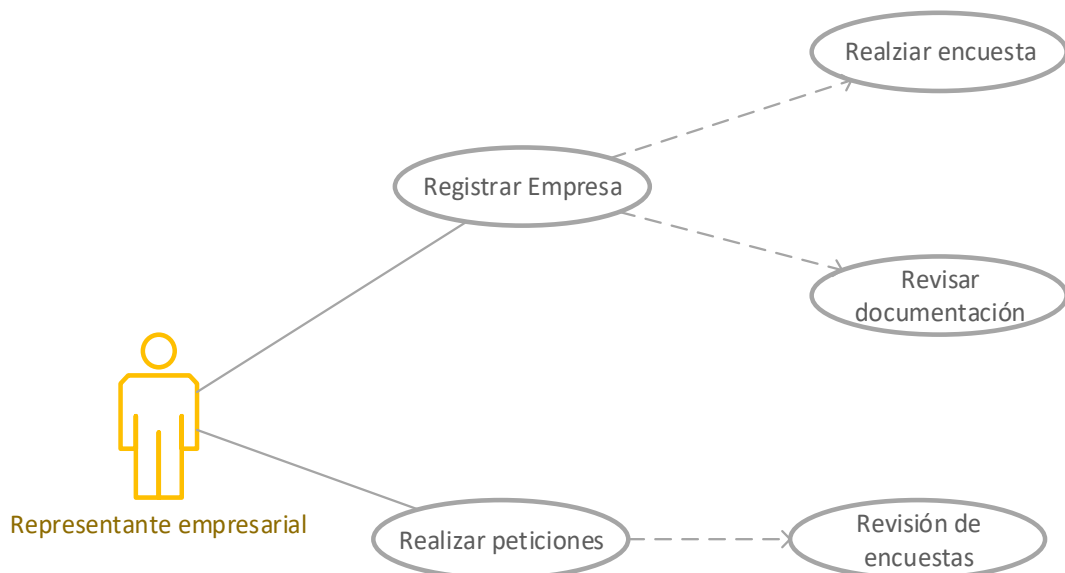
**Ilustración 22.** Caso de uso - Administrador  
Elaborado por: Jayron Silva, Anjelo Minango

## EVALUADOR



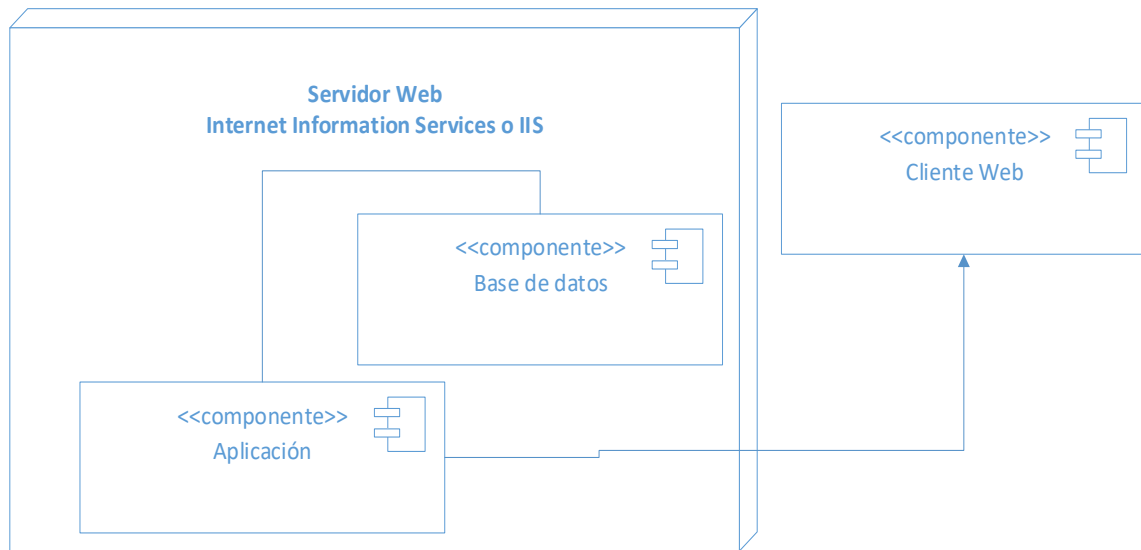
**Ilustración 23.** Caso de uso - Evaluador  
**Elaborador por:** Jayron Silva, Anjelo Minango

## REPRESENTANTE EMPRESARIAL



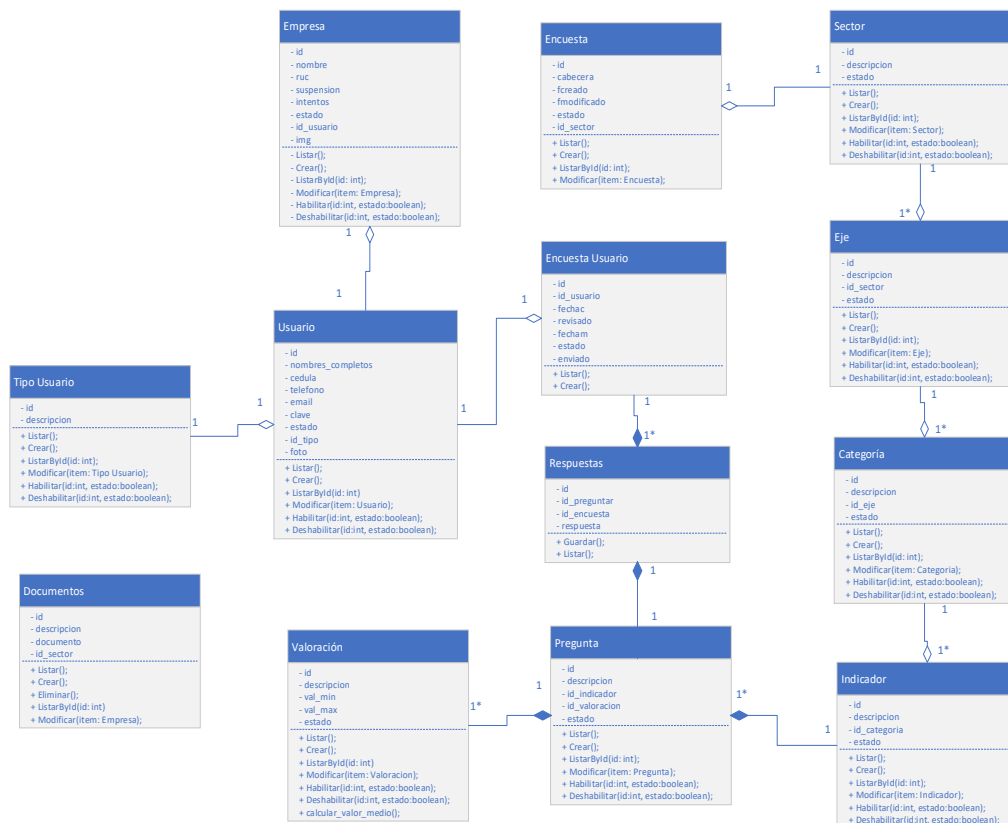
**Ilustración 24.** Caso de uso - Representante Empresarial  
**Elaborado por:** Jayron Silva, Anjelo Minango

## DIAGRAMA DE DESPLIEGUE



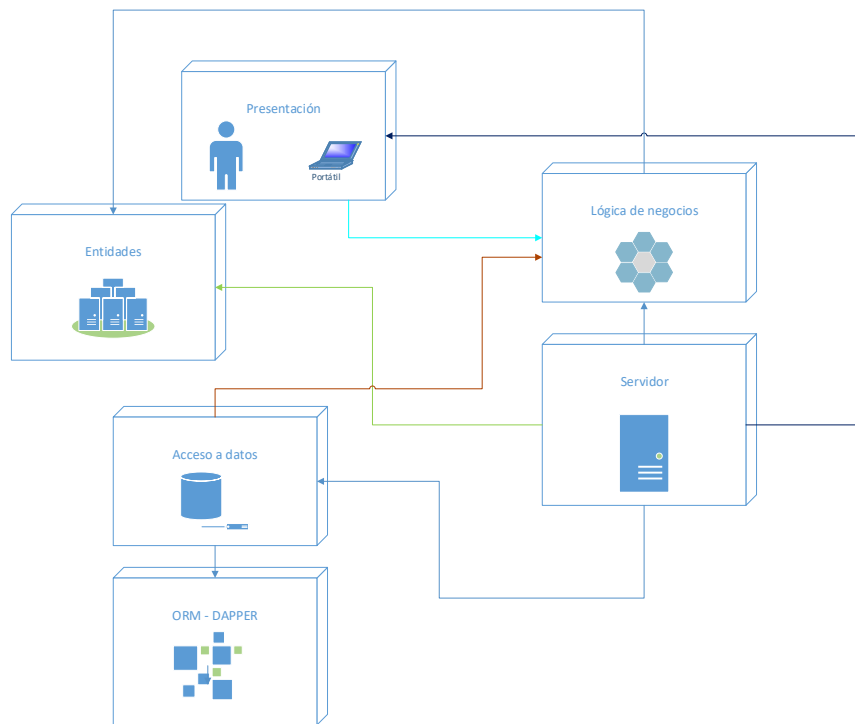
**Ilustración 25.** Diagrama de despliegue  
Elaborado por: Jayron Silva, Anjelo Minango

## DIAGRAMA DE CLASES



**Ilustración 26.** Diagrama de clases  
Elaborado por: Jayron Silva, Anjelo Minango

## DIAGRAMA DE COMPONENTES



**Ilustración 27.** Diagrama de componentes  
**Elaborado por:** Jayron Silva, Anjelo Minango

## CONCLUSIONES

1. Para la comprobación de hipótesis se utilizó la estadística descriptiva. Se agrupó los datos en tablas y posteriormente se analizó para determinar la mejor herramienta. Los resultados obtenidos con la prueba U de Mann Whitney se desarrolló con la herramienta IBM SPSS statistics 25 definiendo que existe diferencia de eficiencia de desempeño entre DAPPER y ENTITY FRAMEWORK, al rechazar la hipótesis nula y aceptar la hipótesis alternativa.
2. Las métricas de evaluación que se utilizaron según la norma ISO/IEC 25010 son: comportamiento temporal, utilización de recursos y capacidad. Cada una de las métricas fueron analizadas en los dos prototipos desarrollados.
3. Mediante los resultados del estudio comparativo se puede concluir que en el tiempo de respuesta las herramientas DAPPER supera a ENTITY FRAMEWORK al poseer el menor tiempo al insertar, leer, actualizar y eliminar. La diferencia entre los dos prototipos es: 2,241ms al insertar, 3,879ms al leer, 1,365ms al actualizar y 3,637ms al eliminar.
4. ENTITY FRAMEWORK supera a DAPPER de manera insignificante en la utilización de recursos al poseer una diferencia en el método insertar de, en: CPU de 1,69%, Disco de 2,31% y de RAM 1,03%, en el método mostrar de, en: CPU de 0,26%, Disco de 9,76% y de RAM de 0,56%, en el método actualizar de, en: CPU de 0,46%, Disco de 2,47% y de RAM de 0,48% y en el método eliminar de, en: CPU de 1,64%, Disco de 4,82% y de RAM de 0,57%
5. ENTITY FRAMEWORK supera a DAPPER de manera insignificante con respecto a la métrica de capacidad al poseer una diferencia en el método insertar de, en: CPU de 0,24%, Disco de 19,54% y de RAM 1,22%, en el método mostrar de, en: CPU de 5,5%, Disco de 12,08% y de RAM de 0,78%, en el método actualizar de, en: CPU de 7,80%, Disco de 17,58,47% y de RAM de 0,09% y en el método eliminar de, en: CPU de 12,04%, Disco de 6,01% y de RAM de 0,519%
6. Con los resultados obtenidos al medir las métricas en los dos prototipos se determinó que DAPPER mejora la eficacia de desempeño en la capa de abstracción de acceso a datos en cuanto a comportamiento temporal y ENTITY FRAMEWORK mejora insignificamente la eficiencia de desempeño en utilización de recursos y capacidad.
7. El desarrollo del sistema de Buenas Prácticas permitió la automatización del proceso de autoevaluación, evaluación de los centros prestadores de servicios del cantón Riobamba permitiendo tomar decisiones que ayuden a mejorar los servicios prestados.

## RECOMENDACIONES

- Al momento de realizar un análisis comparativo es indispensable como conocer y comprender los elementos a comparar, por lo que se recomienda contar con una cantidad considerable de elementos a los cuales se pueda acudir y referenciarse para tomarlos como base del proceso de establecer las diferencias y/o semejanzas.
- Se recomienda la aplicación de tablas que incluyan las diferentes variables y parámetros a comparar para dar una versión más legible y entendible de los objetos con sus respectivos resultados.
- Es muy recomendable delimitar el alcance de la investigación y establecer el conjunto de parámetros que se manejarán en el estudio, para así evitar la pérdida del enfoque u objetivo de la investigación.
- Se recomienda emplear estándares, los mismos que incrementan la credibilidad y validez de la investigación, conociendo que las entidades ISO e IEEE, tienen madurez y trayectoria global entre los diferentes campos que estas abarcan.
- Se recomienda al GADM del cantón Riobamba emplear el Sistema Buenas Prácticas Turismo, aprovechando el objetivo del mismo y todas las características a disposición, y por medio de este contar con un proceso automatizado de “Buenas Prácticas”, la toma de decisiones y el seguimiento del proceso en los prestadores de servicios del cantón Riobamba.

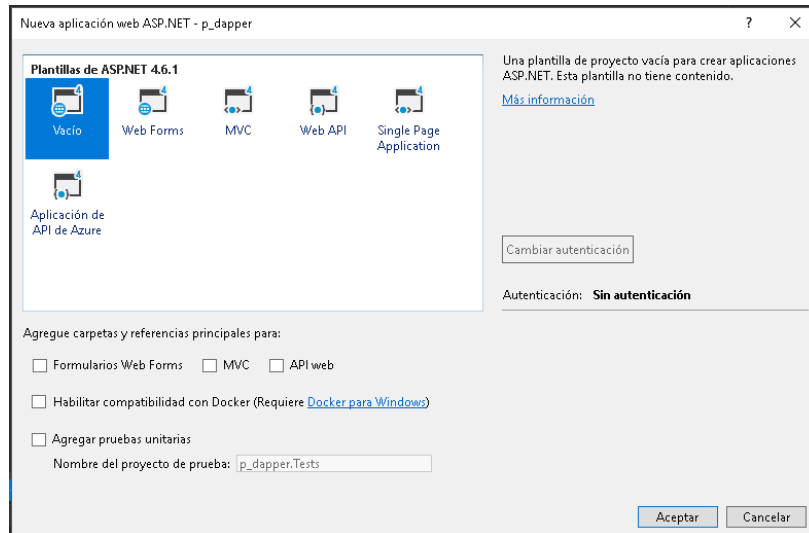
## REFERENCIAS BIBLIOGRÁFICAS

- Aditya Joshi, S. K. (2014). Object Relational Mapping in Comparison to Traditional Data Access Techniques. *International Journal of Scientific & Engineering Research*, 2-5. Obtenido de <https://pdfs.semanticscholar.org/b60f/f23ac93e09722fe7079edfaa846477152ef3.pdf>
- Calderón Moreno, R., & Arenas Seleeey, D. (2016). Mapeo de objetos a través de un motor de datos NOSQL, caso de estudio: framework para desarrollo de aplicaciones web. *Portal de Revistas UPTC*, 2-10. Obtenido de [http://revistas.uptc.edu.co/index.php/ingenieria\\_sogamoso/article/view/4303/4153](http://revistas.uptc.edu.co/index.php/ingenieria_sogamoso/article/view/4303/4153)
- Castillo Estrada, C. M., Karina, C. V., & Luis Antonio, Á. O. (2016). Desarrollo eficiente de aplicaciones empresariales Usando el framework hibernate. *Revista Tecnologia UB*, 2-16.
- Franklin, T. C. (2016). ANÁLISIS DE LA TECNOLOGÍA ORM-HIBERNATE CON RESPECTO A LA PRODUCTIVIDAD, APLICADO AL SISTEMA DE GESTION DE DOCUMENTACION DEL DEPARTAMENTO DE PROCADURIA DE LA UNACH. *Repositorio DSpace UNACH*, 6-12. Obtenido de <http://dspace.unach.edu.ec/bitstream/51000/1628/1/UNACH-EC-ISC-2016-0009.pdf>
- Gutiérrez., J. J. (2014). ¿Que es un framework web? *Departamento de Lenguajes y Sistemas Informaticos*, 1-3. Obtenido de [http://www.lsi.us.es/~javierj/investigacion\\_ficheros/Framework.pdf](http://www.lsi.us.es/~javierj/investigacion_ficheros/Framework.pdf)
- ISO. (2018). *ISO 25000*. Obtenido de ISO 25000: <https://iso25000.com/index.php/normas-iso-25000/iso-25010>
- Lerman, J. (2016). Puntos de datos: Dapper, Entity Framework y aplicaciones híbridas. *MSDN Magazine Blog*. Obtenido de <https://msdn.microsoft.com/en-us/magazine/mt703432.aspx>
- Nadeem Qaisar Mehmood, R. C. (2017). Modeling temporal aspects of sensor data for MongoDB NoSQL database. *SpringerLink*, 3-12. Obtenido de <https://link.springer.com/article/10.1186/s40537-017-0068-5>
- Restrepo, M. F. (2017). Diseño e Implementación de una Herramienta CASE para la Generacion de Capas de Acceso a DATos .Ney. *Universidad Distrital Francisco Jose de Caldas*, 25-46. Obtenido de <http://repository.udistrital.edu.co/bitstream/11349/5962/1/Rodr%C3%ADguezZambranoMar%C3%ADaFernanda2017.pdf>
- Roa Molina, Paola ; Morales, Claribel ; Gutiérrez, Patricia;. (2015). Norma ISO/IEC 25000. Obtenido de <https://revistas.udistrital.edu.co/ojs/index.php/tia/article/download/8373/11349>
- Rodríguez Zambrano, M. F., & Márquez Restrepo, P. Y. (2017). Diseño e Implementación de una Herramienta CASE para la Generacion de Capas de Acceso a DATos .Ney. *Universidad Distrital Francisco Jose de Caldas*, 25-46. Obtenido de <http://repository.udistrital.edu.co/bitstream/11349/5962/1/Rodr%C3%ADguezZambranoMar%C3%ADaFernanda2017.pdf>
- Roger Calderón-Moreno, D. A.-S. (2016). Mapeo de objetos a través de un motor de datos NOSQL, caso de estudio: framework para desarrollo de aplicaciones web. *Portal de Revistas UPTC*, 2-10. Obtenido de [http://revistas.uptc.edu.co/index.php/ingenieria\\_sogamoso/article/view/4303/4153](http://revistas.uptc.edu.co/index.php/ingenieria_sogamoso/article/view/4303/4153)

## ANEXOS

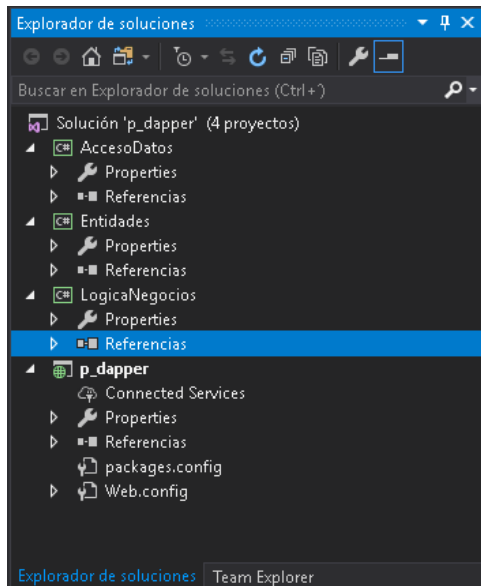
### ANEXO 1. DESARROLLO DE PROTOTIPOS

Los dos prototipos se desarrollaron de manera similar respetando la ingeniería de software aplicado.

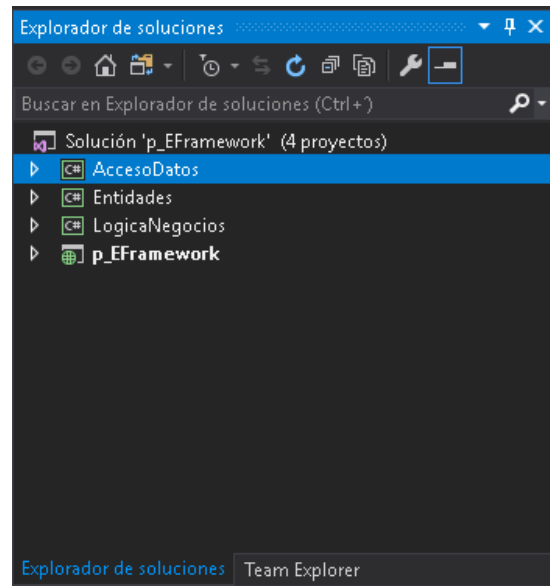


**Ilustración 28.** Desarrollo de prototipos - Nuevo proyecto  
**Elaborado por:** Jayron Silva, Anjelo Minango

Se agregan las capas correspondientes a la arquitectura de software utilizada.



**Ilustración 29.** Prototipo DAPPER con 4 capas  
**Elaborado por:** Jayron Silva



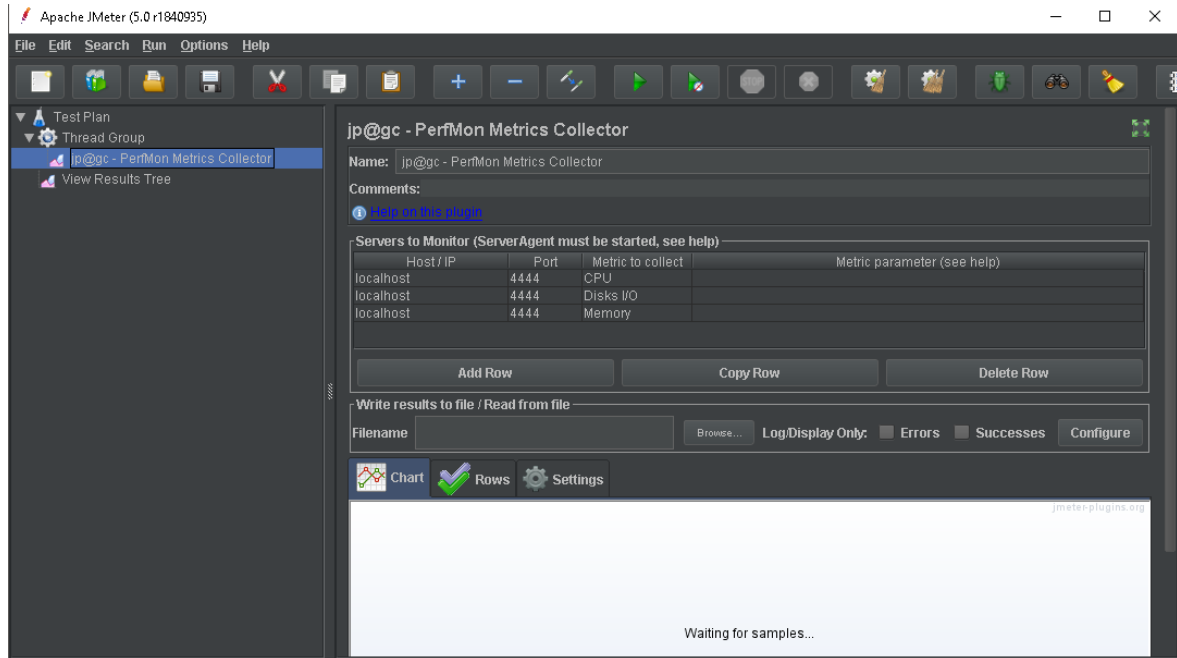
**Ilustración 30.** Prototipo ENTITY FRAMEWORK con 4 capas  
**Elaborado por:** Jayron Silva, Anjelo Minango



## ANEXO 2. RECOPIACIÓN DE DATOS

### JMETER

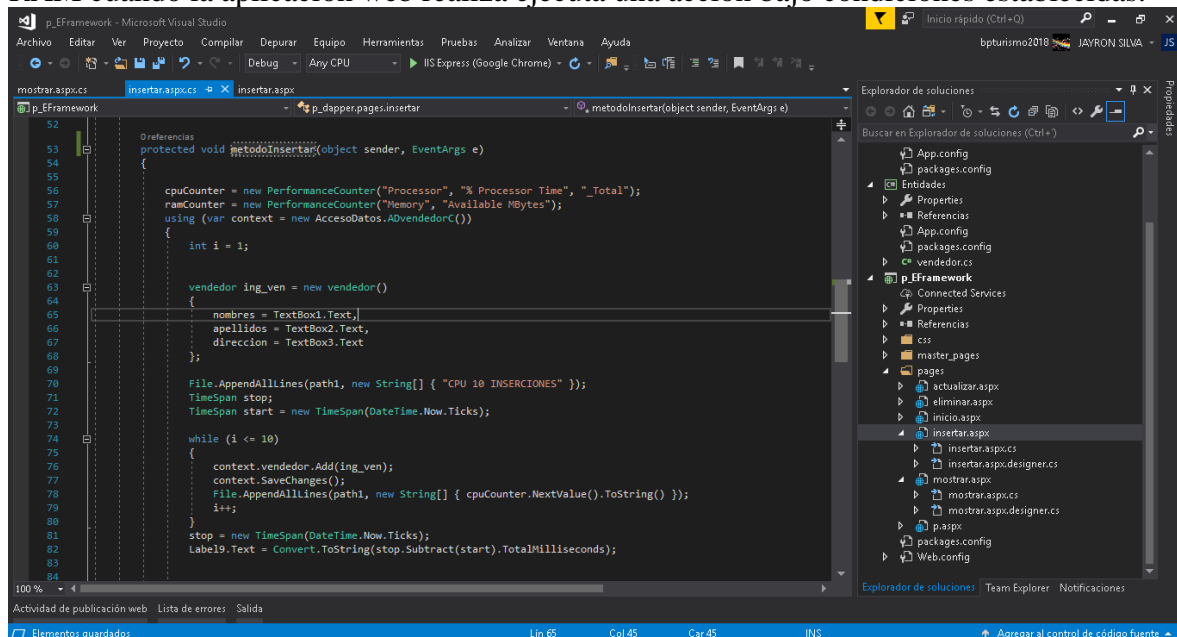
Con la herramienta Jmeter se obtuvo los datos de la utilización de recursos de: CPU, uso de disco y memoria RAM cuando la aplicación web realiza ejecuta una acción bajo condiciones establecidas.



**Ilustración 31.** Recolección de datos con JMeter  
**Elaborado por:** Jayron Silva, Anjelo Minango

### LIBRERÍA SYSTEM.DIAGNOSTIC

Con el IDE Visual Studio y la utilización de la librería System.Diagnostic se obtuvo los datos de tiempos de respuesta y la utilización de recursos de: CPU, uso de disco y memoria RAM cuando la aplicación web realiza ejecuta una acción bajo condiciones establecidas.



**Ilustración 32.** Recolección de datos con Visual Studio  
**Elaborado por:** Jayron Silva, Anjelo Minango

## RECOPIACIÓN DE DATOS

### TIEMPOS DE RESPUESTA HERRAMIENTA VISUAL STUDIO

**Tabla 28.** Datos de Visual Studio Tiempos de respuesta

N°	DAPPER				ENTITY FRAMEWORK			
	Insertar	Actualizar	Mostrar	Eliminar	Insertar	Actualizar	Mostrar	Eliminar
1	1,9982	0,9989	0,9993	2,9974	6,9981	4,9964	2,9967	6,0817
2	1,9973	2,0243	0,9989	1,8140	3,9991	3,9991	1,9977	5,1975
3	1,0546	0,9989	0,9993	0,9989	2,9971	5,0082	1,9978	4,9955
4	2,0143	0,9984	1,0005	1,7425	4,0014	4,9976	1,9973	4,0010
5	1,3593	2,9975	0,9981	1,2937	2,9994	3,9967	1,9974	4,9952
6	2,0049	1,9974	0,0000	1,3477	2,9974	4,9983	3,9971	4,9956
7	1,9981	1,9958	0,9993	1,0079	2,5494	3,9963	2,0013	4,9975
8	0,9910	1,0628	0,9989	1,0017	2,9994	4,9991	1,9982	4,9999
9	0,9993	0,9996	0,9993	1,0028	3,2780	4,9932	1,4046	4,9956
10	1,9969	1,9974	0,0000	2,2439	3,2740	4,7806	2,2981	4,9960
11	1,9993	0,9993	0,9993	2,1017	3,1231	3,9967	2,0013	5,9948
12	2,0207	1,0000	0,9989	2,0250	3,0184	5,8372	1,9981	5,9937
13	0,9989	1,0009	0,0000	1,7848	3,0006	4,3915	1,9990	4,9951
14	1,0001	1,0040	0,9985	1,0040	3,2405	3,9975	0,9984	4,9995
15	0,9989	0,9992	1,0008	2,0021	3,0310	4,9964	2,3107	4,9984
16	0,9996	0,9993	0,0000	1,0028	3,0144	5,9920	1,9191	4,2978
17	1,0017	1,5856	1,0044	1,0004	3,9974	3,9643	1,9973	4,9956
18	1,0044	1,0004	0,0000	1,0076	3,9963	4,9975	1,9974	3,9979
19	2,0681	0,9969	0,9989	1,2281	4,0671	4,9940	1,9977	50,7965
20	1,0012	0,9981	0,0000	0,9977	3,1298	3,9955	2,0025	5,8056
21	0,9989	1,0016	0,0000	2,0021	2,9983	3,9986	1,9989	4,9968

<b>22</b>	1,0028	0,9988	0,0000	0,9977	3,3866	4,9967	1,9985	4,9975
<b>23</b>	2,0013	1,9966	0,9992	1,9985	3,5336	4,5720	2,9970	4,9952
<b>24</b>	1,0029	1,9997	0,0000	0,9985	2,9978	4,3594	1,9994	3,9959
<b>25</b>	0,9921	1,9982	0,0000	2,0017	2,9236	4,9980	1,9961	4,9964
<b>26</b>	1,0009	0,9989	0,9993	1,9982	3,1401	3,9987	1,7302	5,1236
<b>27</b>	2,0080	2,0017	0,0000	0,9977	3,6553	3,9959	2,0001	25,7496
<b>28</b>	2,0049	1,0000	0,9993	2,1329	4,1235	4,9960	1,9997	4,9968
<b>29</b>	50,4884	1,0028	0,9985	2,0021	3,0013	4,9959	1,9981	5,0576
<b>30</b>	1,0001	1,0198	0,9993	1,0012	2,9958	6,0450	1,7682	4,9948
<b>31</b>	2,0104	1,9993	0,9996	1,0024	3,9971	4,6756	1,9965	3,7308
<b>32</b>	1,0040	0,9997	0,0000	0,9992	2,5537	3,9967	1,9974	3,9975
<b>33</b>	1,1455	2,0317	0,9997	2,1341	2,9887	4,7063	1,9973	5,8906
<b>34</b>	1,0005	0,9997	0,9981	3,0010	1,9934	3,9955	1,9958	4,9967
<b>35</b>	0,9988	0,9989	0,0000	2,0100	3,9967	4,4183	1,9985	4,0003
<b>36</b>	1,0001	1,9981	0,9988	1,0158	2,9966	4,1354	1,9977	5,8226
<b>37</b>	0,9985	1,0009	0,0000	1,4710	2,9959	4,9964	1,9974	4,9948
<b>38</b>	1,0238	0,9815	1,0001	0,9977	2,9978	4,4858	1,9977	4,9944
<b>39</b>	1,0044	1,9981	0,0000	3,1203	2,9986	4,9940	1,9970	3,9991
<b>40</b>	1,9989	1,9978	0,0000	1,2905	3,0042	3,9959	1,9965	5,9932
<b>41</b>	1,0040	0,9988	0,0000	2,0732	1,9973	4,9951	0,9985	4,9952
<b>42</b>	0,9977	0,9993	0,0000	2,6679	2,0515	3,9967	1,0017	4,9979
<b>43</b>	1,7128	0,9989	1,0001	1,4813	3,4388	3,9994	1,0044	4,9948
<b>44</b>	0,9996	0,9989	0,9993	1,8429	3,6676	4,9968	1,9978	4,9960
<b>45</b>	1,0033	1,0001	0,0000	2,4608	2,9986	4,0003	1,9954	4,9987
<b>46</b>	0,9993	0,9969	0,9993	1,7113	1,9994	4,9964	1,9966	4,9956
<b>47</b>	0,9992	1,9978	0,0000	1,0131	2,9966	3,9959	1,9990	4,7901
<b>48</b>	1,9974	1,9969	0,0000	2,0029	2,9974	3,9991	1,9993	4,9963
<b>49</b>	2,1210	0,9989	0,9997	1,0727	3,0010	4,9952	1,9994	4,9964

50	0,9985	0,9989	0,9976	0,9985	2,9982	3,7351	1,9993	4,9987
51	0,0000	0,9981	0,0000	1,0036	3,1409	4,9944	1,9994	4,9983
52	1,1206	0,9985	0,9965	2,0380	2,9994	4,9979	1,6259	4,9971
53	2,0115	1,0001	0,0000	1,1123	3,0002	4,6308	1,9965	3,9975
54	0,9993	0,9981	0,0000	2,0009	2,9994	4,9979	1,9974	4,0022
55	2,1542	1,9989	0,9992	0,9996	2,9967	5,0023	1,9977	3,9967
56	1,4778	1,0005	0,0000	1,9982	38,9625	4,0848	1,9970	4,9988
57	0,9981	0,9988	0,0000	1,0004	2,8264	4,7407	1,9776	3,9960
58	1,9966	1,9986	0,9989	2,0077	2,9974	4,6989	1,9970	4,9952
59	1,0111	1,9989	0,9996	1,9989	1,9989	5,0015	2,9978	4,9940
60	1,8235	0,9993	1,0001	1,0005	3,1223	4,4108	2,9959	5,0015
61	1,0763	1,9982	0,0000	1,9985	3,0002	3,9943	1,9823	4,9932
62	1,0020	0,9996	1,0001	1,9982	3,0211	5,9932	2,9970	4,9948
63	1,0008	1,9982	0,9977	2,2005	2,9963	4,9968	1,9973	3,9979
64	2,0005	0,9989	0,9985	1,4466	2,0862	4,0022	1,9970	4,9964
65	1,3161	1,0004	0,0000	0,9985	3,1242	4,9963	1,9985	4,9960
66	0,9996	0,9993	0,0000	1,0044	1,9977	4,9968	1,9986	4,9979
67	1,3356	1,9989	0,0000	2,0025	3,0132	3,9966	1,9973	5,0027
68	1,1253	1,0012	1,0000	0,9909	2,9978	3,9959	0,9993	4,9845
69	1,9989	1,9978	0,0000	0,9993	3,9970	3,9971	2,0009	3,9991
70	0,9973	0,9996	0,9981	2,0855	1,9990	5,2730	1,9973	4,9423
71	1,1139	1,0056	0,0000	2,0025	2,7813	52,9531	1,9974	4,9955
72	0,9985	0,9993	1,0005	1,0049	2,9962	202,8136	1,9969	5,0067
73	1,0005	1,0005	0,0000	2,0025	3,0109	5,9945	1,9962	3,9967
74	1,0032	0,9977	0,0000	0,9985	2,9954	4,9960	1,9970	4,9943
75	1,9990	1,9977	0,9988	1,9962	3,0002	4,6407	2,0005	3,9971
76	1,9997	1,9994	1,0005	2,0025	3,0224	4,4297	0,9993	3,9999
77	1,9982	1,0008	0,0000	0,9984	2,9982	4,3068	1,9981	7,1403

<b>78</b>	0,9988	2,9963	0,0000	0,9993	4,2559	4,6977	15,9848	4,4839
<b>79</b>	1,0001	0,9993	0,0000	2,0017	1,9966	4,9983	1,9986	5,1307
<b>80</b>	1,1059	0,9981	0,9981	1,0068	3,1164	3,9960	1,9977	4,9980
<b>81</b>	0,9984	2,9970	0,9992	2,4114	3,0919	4,1536	1,9990	4,9960
<b>82</b>	0,9985	0,9993	0,0000	2,0021	2,0017	5,1248	1,9973	4,0105
<b>83</b>	1,0103	1,9986	0,9993	1,9981	4,6874	3,9983	1,9986	4,9952
<b>84</b>	0,9989	66,9378	0,0000	1,9816	4,3693	5,9945	1,9985	4,5112
<b>85</b>	1,0041	49,9534	0,9997	1,1419	4,1224	3,9963	2,0017	4,2437
<b>86</b>	0,9989	34,9675	0,0000	1,0025	2,0002	4,9944	1,9871	5,0106
<b>87</b>	0,9996	31,9696	0,9996	0,9997	2,9986	4,5961	1,9969	5,2280
<b>88</b>	2,0028	26,9744	0,9992	2,2415	2,9982	4,0788	1,9990	5,9932
<b>89</b>	1,1004	0,9985	0,0000	0,9997	2,0014	4,6866	1,9981	5,9941
<b>90</b>	0,9945	0,9993	0,0000	2,1028	4,0050	3,9983	1,9981	4,9948
<b>91</b>	1,0044	1,9977	1,0001	1,0028	3,7636	3,9959	1,9986	5,4148
<b>92</b>	0,9997	0,9993	0,0000	1,0024	3,9987	4,9952	1,9989	7,1304
<b>93</b>	0,9989	0,9993	0,0000	0,9989	3,9990	5,0102	1,9974	3,9963
<b>94</b>	0,9989	0,9988	0,9993	1,9981	4,2290	4,7533	0,9984	4,3325
<b>95</b>	1,0060	0,9993	0,0000	1,9982	2,9958	4,7624	0,9993	4,9951
<b>96</b>	1,1253	0,9989	0,0000	0,9997	3,0006	4,4143	1,9985	3,9955
<b>97</b>	1,0376	0,9984	0,0000	1,9997	2,9974	3,9734	0,9985	4,9948
<b>98</b>	0,9969	0,9993	0,9989	1,9973	2,9978	4,9620	1,9985	6,9925
<b>99</b>	1,4505	1,9978	0,0000	2,9975	2,9994	5,0058	0,9981	52,9531
<b>100</b>	0,9976	0,9988	1,0001	0,9996	2,9983	3,9990	1,9993	4,9936
<b>101</b>	1,0025	0,9910	0,0000	2,0582	1,9966	4,9947	1,9018	5,9956
<b>102</b>	1,5070	1,9985	1,0000	1,9969	2,9962	3,9967	1,9985	3,9959
<b>103</b>	1,0024	0,9989	1,0000	1,4995	3,0014	3,9979	1,9989	4,9936
<b>104</b>	0,9996	1,0000	0,0000	1,9965	2,6299	4,9936	1,9982	3,8959
<b>105</b>	1,4817	0,9989	0,9993	1,3881	2,9955	4,9972	2,0005	5,9929

<b>106</b>	1,0759	0,9993	1,0000	1,4253	1,9946	4,9869	1,9997	5,9936
<b>107</b>	1,0024	1,9977	0,9997	0,9997	3,0033	4,9956	1,9974	4,3890
<b>108</b>	1,9989	0,9989	0,0000	2,9164	2,3419	3,9986	1,9986	3,9975
<b>109</b>	2,0187	0,9993	0,9997	2,0029	3,9983	4,9956	1,9997	4,0113
<b>110</b>	0,9992	0,9993	0,0000	0,9973	2,9963	3,7462	1,9997	5,5084
<b>111</b>	0,9993	0,9997	0,0000	2,1313	2,9963	4,9971	1,9986	3,9990
<b>112</b>	2,0396	0,9993	0,9992	1,0554	2,9974	3,9995	1,9986	4,0002
<b>113</b>	0,9985	0,9993	0,0000	1,4880	2,9986	4,3867	1,9965	4,1460
<b>114</b>	0,9988	1,0001	0,0000	2,3877	2,9979	5,0627	1,0017	4,9947
<b>115</b>	0,9993	0,9988	0,9989	1,9966	3,0207	4,0093	1,9342	4,9952
<b>116</b>	1,7393	0,9997	0,0000	0,9997	2,9986	4,9951	1,9966	3,9995
<b>117</b>	1,0020	1,9994	0,0000	2,0021	2,9974	3,9983	1,9965	3,9971
<b>118</b>	2,0013	0,9992	0,9981	0,9981	2,0882	4,9964	1,9966	3,9979
<b>119</b>	0,9977	0,9993	0,0000	1,7843	2,9997	4,9956	1,5520	4,9948
<b>120</b>	2,0444	1,9973	1,0001	2,0712	2,9966	3,9990	1,9973	4,9940
<b>121</b>	1,9990	0,9981	0,9992	1,6540	2,9994	4,9987	1,9978	4,9964
<b>122</b>	0,9989	1,0009	0,9977	0,9996	3,0113	4,9951	1,9978	3,9979
<b>123</b>	2,3060	1,9977	0,0000	1,0032	3,0314	4,9968	1,9982	4,9963
<b>124</b>	0,9902	1,0009	0,9997	1,6413	2,9970	4,9983	1,9969	4,5218
<b>125</b>	1,0013	2,9998	0,0000	1,0004	2,9974	5,4310	1,9978	4,0023
<b>126</b>	0,9989	1,9990	0,9985	1,0001	2,9986	5,0627	1,9973	3,9998
<b>127</b>	1,0095	1,9985	0,9985	0,9993	3,3076	5,5665	1,0032	5,9952
<b>128</b>	1,9990	1,9978	0,0000	0,9996	2,9962	4,4361	1,9994	3,9963
<b>129</b>	78,9255	2,9994	0,9997	1,9990	4,0121	4,9940	1,9985	4,9956
<b>130</b>	0,9996	1,9985	0,9992	1,0004	4,1516	4,0006	1,9978	3,9959
<b>131</b>	0,9977	0,9997	0,9981	1,9990	3,1555	4,9948	0,9985	4,9932
<b>132</b>	0,9993	0,9997	0,0000	1,9977	3,5102	4,5673	2,0052	5,3192
<b>133</b>	0,9969	0,9997	0,9989	2,9983	2,9958	4,9671	1,9974	4,9940

<b>134</b>	1,9986	0,9993	0,0000	1,9978	2,9974	4,9952	1,9985	4,0164
<b>135</b>	0,9997	1,9993	0,9997	1,0005	2,9975	4,9968	1,9989	5,5357
<b>136</b>	1,0009	1,0000	0,0000	1,9981	3,4095	3,9967	1,4675	4,9955
<b>137</b>	2,0005	1,0005	0,9989	1,9978	3,0113	4,9948	1,9973	4,5056
<b>138</b>	1,0000	0,9992	0,9993	1,9985	2,9974	3,9955	1,9970	5,5263
<b>139</b>	1,9982	0,9993	1,0001	0,9993	1,9986	4,9979	1,9973	3,9956
<b>140</b>	0,9997	1,0052	0,9977	2,0009	1,9978	3,9960	1,9986	4,9884
<b>141</b>	1,9985	1,9989	0,9989	0,9989	1,9843	5,9953	1,0001	3,9983
<b>142</b>	0,9985	1,0076	0,9989	1,0028	2,9994	4,7320	1,9970	5,1386
<b>143</b>	0,9977	0,9989	1,0001	2,9986	3,0054	6,0007	1,9978	4,8632
<b>144</b>	1,9994	0,9992	1,0016	1,9994	5,0086	6,7886	1,9985	4,0128
<b>145</b>	0,9997	1,0005	0,0000	0,9997	5,0027	5,1635	1,9859	4,9987
<b>146</b>	0,9980	0,9989	0,0000	1,9977	3,9991	3,8501	1,9985	4,9948
<b>147</b>	1,0005	1,9985	0,0000	1,9230	2,9959	4,5191	1,9966	4,7518
<b>148</b>	0,9996	0,9985	0,0000	1,9997	3,9967	4,9956	1,9981	4,9947
<b>149</b>	0,9997	0,9985	0,9997	1,0020	2,9947	4,9944	1,9982	4,9984
<b>150</b>	1,9989	1,9981	0,0000	2,0025	3,1357	4,0110	1,9985	4,9956
<b>151</b>	1,0000	0,9997	0,0000	1,0009	2,9954	5,1670	1,9982	4,9947
<b>152</b>	0,9985	1,9981	0,9992	2,9575	2,9970	4,9948	2,0036	3,9951
<b>153</b>	2,9982	0,9993	0,0000	2,0017	2,9974	6,0597	1,9982	4,0295
<b>154</b>	0,9989	1,9989	1,0001	2,0206	2,9986	3,9971	1,9994	3,9963
<b>155</b>	0,9906	0,9992	0,9993	2,5027	2,9967	4,9976	1,9986	3,9994
<b>156</b>	1,9981	1,9970	0,9993	1,1316	3,9963	4,9948	1,9993	3,9943
<b>157</b>	0,9989	0,9988	0,0000	1,0004	2,9974	4,5602	1,9985	3,9990
<b>158</b>	0,9981	2,9982	0,9985	1,8097	2,9974	3,9982	1,9981	3,9990
<b>159</b>	2,9970	1,9997	1,0001	1,0036	2,0017	4,6308	1,9986	4,9983
<b>160</b>	0,9989	1,9990	1,0004	1,4829	2,0009	4,2172	1,9997	4,9999
<b>161</b>	0,9993	0,9992	0,0000	1,1905	3,9951	4,9952	1,9982	4,9995

<b>162</b>	0,9989	1,9977	0,0000	1,4225	2,9962	3,9947	1,9982	4,9063
<b>163</b>	0,9989	0,9997	0,9993	3,4498	2,9946	4,3661	1,9985	4,9671
<b>164</b>	0,9996	1,9966	0,9984	1,0045	2,9971	3,9951	0,9997	3,9963
<b>165</b>	0,9989	0,9941	0,9981	1,9974	1,9985	5,0078	1,9990	3,9872
<b>166</b>	0,9997	0,9993	0,0000	1,9997	2,9970	4,3341	1,9994	5,9956
<b>167</b>	0,9997	0,9992	0,0000	0,9997	2,9970	3,9983	1,9985	3,9967
<b>168</b>	1,9974	0,9993	0,9992	1,9981	4,5918	4,9955	1,9990	4,9979
<b>169</b>	0,9996	0,9981	0,0000	2,0014	2,9930	4,6566	1,9993	4,9948
<b>170</b>	0,9981	0,9977	0,9993	1,9974	2,9986	5,0627	1,9998	5,9957
<b>171</b>	0,9993	0,9973	0,0000	1,2715	3,4147	5,4595	2,0084	4,9967
<b>172</b>	0,9992	0,9992	0,0000	1,9467	3,9979	47,2515	1,9986	4,2938
<b>173</b>	1,9978	1,9977	0,0000	3,1207	50,0727	5,9221	1,9985	4,9944
<b>174</b>	0,9984	0,9981	0,9992	1,9610	45,1498	4,6486	1,9993	5,9956
<b>175</b>	0,9989	1,9990	0,9989	1,0009	27,0602	3,9995	1,3612	5,1679
<b>176</b>	52,9512	0,9977	0,9989	3,0061	2,9990	5,3338	1,9986	4,0722
<b>177</b>	1,9985	1,9989	0,0000	1,0068	3,0042	4,7759	1,9982	3,9951
<b>178</b>	0,9988	1,9986	0,9992	0,9969	2,9959	3,9951	1,9977	3,9955
<b>179</b>	1,0000	1,9985	0,0000	2,5344	2,0179	5,0947	1,9982	5,4369
<b>180</b>	1,9982	0,9985	1,0001	1,0040	3,0030	5,0047	1,9981	4,7475
<b>181</b>	0,9984	0,9992	0,0000	2,0278	2,9967	3,9998	1,9994	4,9983
<b>182</b>	2,9967	3,9923	0,9992	1,9957	1,9993	4,9948	2,0147	41,5285
<b>183</b>	0,9992	1,0000	0,0000	1,9970	2,9990	4,9940	1,9982	22,4100
<b>184</b>	0,9989	4,9959	0,0000	0,9966	2,0005	5,5018	1,9981	6,0181
<b>185</b>	1,9982	7,9934	0,0000	1,0005	2,9967	4,9956	2,0065	5,1252
<b>186</b>	0,9984	8,9915	0,9988	1,9974	1,9973	4,9960	1,9990	4,9976
<b>187</b>	1,0005	11,9893	0,0000	1,9989	1,9981	4,9960	1,9993	3,9963
<b>188</b>	2,9974	3,9967	1,0001	2,2281	3,9951	4,3681	1,9985	4,9955
<b>189</b>	0,9973	175,8368	0,0000	1,0028	1,9994	4,9964	1,9998	3,9971



<b>190</b>	0,9989	38,9641	0,9989	1,0032	2,1491	5,3662	1,9993	4,9944
<b>191</b>	0,9989	1,0009	0,0000	0,9980	3,0010	4,9968	1,9994	3,9963
<b>192</b>	2,9966	1,9981	0,0000	2,0021	3,0196	3,9967	1,9993	4,9822
<b>193</b>	44,4319	1,9974	0,0000	1,1253	2,9994	5,6589	1,9994	4,9940
<b>194</b>	0,9985	0,9988	0,9996	2,1313	3,9975	33,7350	2,9974	5,1034
<b>195</b>	2,0005	0,9973	1,0000	1,0000	1,9989	5,9964	1,9998	4,9988
<b>196</b>	0,9988	1,0000	0,0000	1,9970	3,1136	5,0943	1,9985	6,1170
<b>197</b>	0,9993	1,9982	0,9993	1,0277	2,9967	4,8272	1,9986	3,9963
<b>198</b>	1,0005	1,9982	0,9993	1,0029	3,4372	7,0111	0,9981	4,9952
<b>199</b>	0,9993	1,9973	0,0000	1,9978	2,0009	4,9944	1,9962	5,9949
<b>200</b>	0,9985	1,9986	0,9989	0,9996	3,0030	3,9714	1,9990	4,9972
<b>201</b>	0,9997	0,9992	0,0000	1,0001	3,9959	4,9987	2,0021	4,9972
<b>202</b>	0,9997	1,9982	0,0000	1,9760	4,0144	4,9960	1,9985	4,9956
<b>203</b>	1,5342	10,9904	1,0000	0,9997	4,2855	4,9952	1,9977	4,9959
<b>204</b>	1,9973	7,9930	1,0004	0,9989	2,9974	4,9960	1,9966	4,3081
<b>205</b>	1,0024	7,9911	0,0000	2,1281	1,9978	4,9983	1,9989	4,9952
<b>206</b>	1,0028	0,9985	0,9997	1,0000	3,0018	5,9933	1,9966	4,9959
<b>207</b>	1,9970	71,9326	0,0000	2,0029	3,0014	4,9955	1,9985	4,9960
<b>208</b>	1,0008	0,9993	0,9989	1,9298	3,0168	5,3923	1,9978	4,9944
<b>209</b>	1,0032	17,9830	0,9997	2,0831	3,1151	4,5313	1,9982	4,9963
<b>210</b>	1,9974	36,4321	0,9992	1,0028	4,0303	4,9355	1,9973	4,9964
<b>211</b>	1,9973	43,9577	0,0000	2,0001	2,9966	4,9980	1,9994	4,9975
<b>212</b>	1,9982	0,9996	0,9985	0,8926	3,3752	4,9975	1,9989	3,9955
<b>213</b>	0,9996	0,9985	0,0000	2,0005	2,9959	4,9972	1,9986	3,7604
<b>214</b>	2,0111	1,0009	0,0000	1,0550	1,9997	3,9983	1,9986	4,9952
<b>215</b>	1,0032	0,9985	0,0000	1,0025	3,0006	5,9932	1,9977	4,9991
<b>216</b>	0,9981	1,9986	1,0012	0,9985	3,4253	5,2145	1,9989	4,9964
<b>217</b>	1,3398	1,9985	1,0001	2,0017	2,9971	4,9952	1,9994	4,4843

<b>218</b>	1,0028	0,9993	0,9985	1,0013	4,9948	6,0095	1,9981	4,9951
<b>219</b>	2,9970	1,9985	0,0000	1,0143	3,9960	3,9995	1,9989	3,9955
<b>220</b>	1,6098	0,9993	0,9993	2,0444	3,9983	5,9940	1,9985	4,8434
<b>221</b>	0,9985	1,0000	0,0000	0,9973	4,0007	4,9944	1,9990	4,9943
<b>222</b>	1,9981	1,0005	0,9976	2,0507	2,9959	4,9952	1,9997	4,9980
<b>223</b>	0,9997	0,9993	0,9989	1,0000	3,0231	5,9949	1,9994	4,9948
<b>224</b>	0,9989	2,0025	0,9985	1,0001	2,8046	4,9956	1,9997	4,9948
<b>225</b>	2,0009	1,9982	0,9977	1,9986	2,9962	4,9936	1,9986	4,9955
<b>226</b>	0,9989	0,9996	0,0000	3,0002	2,0064	4,9968	1,9989	4,9968
<b>227</b>	1,9957	0,9993	1,0004	1,2786	1,9977	5,4942	2,0009	5,9944
<b>228</b>	2,0021	1,9982	0,0000	2,1242	3,1215	4,6154	2,0061	4,9952
<b>229</b>	1,0013	1,9978	0,9993	1,9879	3,9959	5,3638	1,6485	4,1239
<b>230</b>	1,1313	0,9989	1,0005	1,0032	2,9986	6,4927	2,0001	4,9991
<b>231</b>	1,9974	1,0009	0,9981	0,9989	3,9967	4,9952	1,9989	5,3974
<b>232</b>	0,9976	2,0001	0,0000	0,9997	4,1342	4,9955	1,0000	4,9877
<b>233</b>	0,9977	0,9993	0,9993	1,0041	3,9995	4,9979	1,9981	4,9983
<b>234</b>	1,9990	0,9993	0,0000	1,0009	4,1342	4,9948	1,9998	4,0023
<b>235</b>	0,9989	0,9993	0,0000	0,9997	3,0018	4,9956	0,9996	3,9963
<b>236</b>	0,9989	0,9989	0,0000	3,3337	4,0318	4,9983	1,9993	5,0292
<b>237</b>	2,0017	0,9992	1,0005	1,0037	3,9963	5,9957	1,9990	4,0070
<b>238</b>	0,9981	1,9994	0,0000	0,9985	3,9963	4,9975	1,9989	5,4630
<b>239</b>	0,9985	0,9992	0,9996	2,0104	2,9986	4,9988	1,9986	3,9963
<b>240</b>	2,9966	1,9970	0,9973	0,9977	1,9970	6,1865	1,9998	4,0117
<b>241</b>	1,0024	1,9990	1,0008	2,0681	3,0370	4,9944	0,9890	4,9276
<b>242</b>	1,6172	0,9997	0,9977	1,5260	2,0005	4,9959	2,0009	5,9961
<b>243</b>	1,5722	0,9997	0,9985	1,0020	2,3360	5,9936	1,9990	4,9956
<b>244</b>	0,9989	1,9981	0,9981	2,0622	2,9982	5,0094	1,9982	3,9967
<b>245</b>	0,9992	0,9997	0,0000	1,0008	1,9982	5,0000	1,9981	3,9987

<b>246</b>	1,9990	0,9996	0,9976	1,1494	2,9963	5,1007	1,9977	4,9952
<b>247</b>	1,1269	0,9993	0,0000	1,5018	2,9955	4,9940	2,0002	4,9948
<b>248</b>	0,9997	0,9997	0,9997	1,0064	4,0030	4,1738	1,9993	4,9991
<b>249</b>	1,9986	0,9993	0,0000	2,0014	3,6696	4,9964	1,9989	4,9959
<b>250</b>	0,9997	1,9986	0,0000	1,0071	3,9951	4,9963	1,9973	5,9929
<b>251</b>	1,1273	1,9985	0,9997	1,0530	3,4696	5,9940	2,0006	4,9182
<b>252</b>	1,0060	1,9982	0,0000	2,2988	3,9268	4,9980	1,9989	4,0165
<b>253</b>	3,0017	1,9981	0,9988	1,1312	3,1361	5,1062	1,9986	4,9976
<b>254</b>	1,1368	1,9993	0,9985	1,0016	2,9998	4,9987	1,9998	3,9987
<b>255</b>	0,9988	0,9997	0,9985	1,7074	3,9947	5,9936	2,0116	5,4409
<b>256</b>	2,0013	0,9989	0,0000	1,0033	3,9982	52,2009	2,0001	4,9964
<b>257</b>	1,3157	0,9993	0,9997	1,0190	3,0224	24,2781	2,0001	4,9956
<b>258</b>	1,9981	1,9981	0,0000	2,1214	2,6852	5,9937	1,3932	3,9963
<b>259</b>	1,1518	0,9993	0,9984	1,0008	202,4114	4,9968	1,9953	3,9979
<b>260</b>	0,9946	0,9977	0,0000	1,0040	2,9966	5,1864	1,9982	5,0070
<b>261</b>	0,9981	1,9982	0,9993	1,5172	3,4218	5,4002	1,9966	5,0086
<b>262</b>	2,0017	2,9974	0,0000	1,7682	3,0575	4,9987	0,9993	5,5416
<b>263</b>	1,0048	1,0083	0,0000	0,9961	3,0002	4,9983	2,0057	5,2611
<b>264</b>	0,9788	0,9993	0,9997	1,1407	3,0010	5,9604	1,9966	4,9948
<b>265</b>	1,0036	0,9993	0,0000	0,9993	2,4779	5,9980	1,9966	5,0516
<b>266</b>	0,9989	0,9985	0,9981	0,9989	30,3433	4,9952	1,9990	3,9991
<b>267</b>	1,9989	2,9970	0,9981	1,9997	2,9986	5,0082	1,9962	4,9984
<b>268</b>	0,9997	0,9993	0,0000	2,0061	2,9974	4,9833	1,9969	3,9983
<b>269</b>	1,0024	1,0000	0,0000	1,0056	2,9979	5,1493	1,9974	4,9987
<b>270</b>	1,0040	1,0021	0,9977	0,9993	2,9987	4,9968	1,9970	4,9987
<b>271</b>	1,0012	1,0032	0,9997	1,9989	2,9994	5,8194	2,0076	4,9952
<b>272</b>	1,0008	1,9982	0,0000	0,9973	2,9979	5,1228	1,2640	6,1501
<b>273</b>	0,9996	1,9981	0,9985	0,9981	2,9982	4,9972	1,0095	4,9952

<b>274</b>	0,0000	0,9997	0,9988	1,9986	1,9981	4,9944	1,9989	4,9976
<b>275</b>	1,0028	1,0008	0,0000	0,9985	2,9986	4,9975	1,9998	4,4053
<b>276</b>	1,9994	0,9997	0,9985	2,3763	2,9986	4,9960	2,9986	5,1311
<b>277</b>	0,9981	0,9992	1,0001	1,5039	3,0255	3,9971	1,9993	5,1726
<b>278</b>	0,9985	0,9989	1,0004	0,9989	3,0002	5,9932	2,0061	4,9956
<b>279</b>	2,9963	0,9977	0,9997	2,0080	3,1251	6,1292	1,9990	4,9952
<b>280</b>	1,0340	0,9993	0,9993	0,9988	2,0002	4,9963	1,9993	4,8790
<b>281</b>	1,0036	0,9921	0,9993	1,3723	3,0005	4,9956	1,9989	5,9941
<b>282</b>	2,2507	0,9993	0,0000	2,0021	2,0014	4,7304	1,9986	4,9944
<b>283</b>	1,0033	0,9993	0,9976	1,8741	2,8524	4,8024	1,9982	3,9963
<b>284</b>	1,0008	1,9990	0,0000	1,0005	2,1543	5,5914	1,9985	4,9960
<b>285</b>	0,9989	1,9985	0,9993	1,4833	2,9966	7,0123	1,9982	4,9944
<b>286</b>	1,9981	0,9993	1,0005	2,0392	2,9974	4,9158	1,0028	3,9947
<b>287</b>	0,9989	1,9985	0,0000	2,0021	3,0026	4,9984	1,9982	3,9097
<b>288</b>	2,0025	1,9989	0,0000	1,3877	3,9975	4,9984	1,9974	3,9975
<b>289</b>	1,0024	1,0005	1,0005	0,9981	2,9970	4,9948	1,9978	4,9992
<b>290</b>	2,0025	2,0001	0,0000	1,9906	2,9970	4,9988	1,9977	5,0513
<b>291</b>	1,0024	1,0001	1,0005	0,9965	4,0066	5,3729	1,9993	3,9998
<b>292</b>	4,0679	2,0017	0,0000	1,0254	3,9983	5,9932	2,0092	5,9936
<b>293</b>	1,0025	0,9997	0,9997	1,3592	4,0007	4,9948	1,9974	4,9952
<b>294</b>	2,9978	1,0080	0,9992	0,9966	3,7035	4,9956	1,9985	4,9940
<b>295</b>	0,9997	1,9974	0,9985	1,8978	4,0173	5,9929	1,0870	5,9965
<b>296</b>	0,9997	0,9989	0,0000	2,0021	3,9860	4,9971	1,9985	4,9979
<b>297</b>	1,9973	1,0001	1,0000	1,1945	3,9959	4,9988	0,9981	4,9971
<b>298</b>	2,1009	0,9992	1,0001	1,0009	3,9975	5,9944	1,9982	4,9936
<b>299</b>	2,0281	1,0001	0,0000	2,0669	3,9983	5,7633	1,9973	3,9979
<b>300</b>	0,9989	1,0004	0,0000	1,9989	3,0164	6,9360	1,9994	4,9971
<b>301</b>	1,0032	0,9997	0,0000	1,1313	4,1144	4,9750	1,9977	4,9976

<b>302</b>	1,0005	1,0033	0,0000	2,0013	3,9955	4,8704	1,9970	4,9995
<b>303</b>	1,4086	0,9976	1,0001	1,4379	3,9967	5,9964	0,9981	4,9947
<b>304</b>	0,9993	0,9993	0,0000	1,0104	3,0017	5,0094	0,9973	3,9967
<b>305</b>	1,0052	0,9985	0,0000	0,9977	3,9963	6,0063	1,9989	4,0046
<b>306</b>	1,0008	1,9969	0,0000	1,9985	3,0163	29,2382	0,9981	4,9387
<b>307</b>	1,0028	1,9986	1,0000	1,9989	3,8023	7,0107	1,9978	4,0113
<b>308</b>	0,9977	0,9996	0,9989	3,5542	3,0022	4,8257	1,9989	3,9979
<b>309</b>	1,3419	1,9986	0,9977	1,2833	3,8710	4,9951	0,9942	4,9987
<b>310</b>	2,0017	0,9973	0,9997	1,9969	3,1697	4,9964	1,9989	5,2698
<b>311</b>	2,0088	0,9992	0,0000	0,9997	2,9978	6,9933	1,9990	5,3733
<b>312</b>	1,9978	1,0013	0,0000	0,9997	3,0041	4,9963	1,9974	3,9963
<b>313</b>	1,9970	1,9977	0,0000	1,4809	3,5297	4,9952	1,9969	3,9971
<b>314</b>	0,9981	0,9989	0,9993	2,0025	2,9974	4,9991	1,9977	4,3001
<b>315</b>	1,9973	0,9989	0,9993	1,0000	2,9978	4,9968	1,9986	4,9960
<b>316</b>	0,9997	0,9993	0,0000	1,4640	3,0195	5,9976	1,9981	5,9944
<b>317</b>	1,9989	0,9989	0,9992	1,9990	3,9979	5,0039	1,9985	4,9952
<b>318</b>	1,2359	0,9981	0,9989	0,9962	3,9995	5,7487	1,9973	4,9972
<b>319</b>	1,0020	0,9993	0,9993	2,1230	4,9940	5,9952	1,9958	3,9955
<b>320</b>	1,9974	1,9998	0,9993	1,0024	4,9944	4,9967	1,9997	4,7775
<b>321</b>	0,9988	1,9985	0,9997	0,9992	2,9978	4,7506	1,9982	5,0102
<b>322</b>	1,0068	1,9978	0,0000	2,0021	1,9973	3,9983	1,9981	5,5674
<b>323</b>	1,4430	1,9989	1,0004	1,0001	2,9962	5,8929	1,9993	4,7771
<b>324</b>	1,2774	1,9982	1,0001	1,8365	2,9958	6,0011	0,9981	5,0149
<b>325</b>	0,9980	1,9997	0,0000	1,0451	3,0769	5,9924	0,9993	3,9975
<b>326</b>	2,0942	1,9993	0,0000	1,9978	3,0013	4,9972	1,9977	5,0078
<b>327</b>	0,9969	1,9966	0,9989	1,3715	3,6530	5,6412	0,9981	5,3057
<b>328</b>	2,9958	0,9993	0,9985	2,1329	4,5096	4,9960	1,9985	4,9967
<b>329</b>	0,9977	1,0008	0,9993	2,0021	4,1488	4,9948	1,9969	4,9948

<b>330</b>	1,0032	0,9993	0,9988	1,9994	3,9995	5,9941	1,9970	5,0000
<b>331</b>	1,0040	1,9974	0,9997	2,0124	3,0022	6,2335	1,9977	5,4042
<b>332</b>	1,0024	0,9993	0,0000	1,0033	3,1247	6,9929	1,9977	4,9968
<b>333</b>	1,1289	1,0001	0,0000	1,0854	4,0860	4,8031	1,9978	5,9964
<b>334</b>	1,5339	0,9992	0,9993	0,9996	3,0614	4,9955	1,9985	4,9960
<b>335</b>	1,1854	2,9982	0,9992	2,0444	2,9990	4,0086	1,9982	4,9960
<b>336</b>	1,0028	0,9997	0,9993	1,0048	2,9966	4,8529	1,9989	4,9956
<b>337</b>	2,0017	0,9993	0,0000	0,9981	3,0959	4,9963	1,9993	4,9955
<b>338</b>	0,9926	0,9997	0,0000	0,9981	3,0002	4,9960	0,9985	5,2718
<b>339</b>	1,0028	0,9997	0,0000	2,0139	2,9982	4,9975	0,9985	4,7012
<b>340</b>	1,0067	0,9997	0,0000	1,0001	2,9725	5,1785	1,9993	4,9133
<b>341</b>	1,8820	1,0001	0,9993	1,9990	2,9970	4,6514	1,9986	4,9383
<b>342</b>	0,9988	1,9985	1,0004	0,9973	3,9963	6,0051	1,9973	5,1430
<b>343</b>	0,9993	1,9981	0,9992	1,9981	4,0018	4,9932	1,9974	3,9991
<b>344</b>	1,4868	0,9988	0,9993	0,9993	3,2219	4,9865	1,9970	4,9979
<b>345</b>	1,1234	1,9978	0,0000	1,9994	3,9951	5,9940	1,9985	3,9975
<b>346</b>	2,0025	2,0001	0,9993	2,9986	3,0006	4,9980	1,9981	4,9963
<b>347</b>	0,9980	1,9970	0,9993	1,9994	3,7580	5,9937	1,9977	5,9932
<b>348</b>	0,9985	0,9997	0,9992	1,9997	3,0026	4,9956	1,9966	5,0110
<b>349</b>	1,9986	2,9955	0,9993	1,7876	3,1219	5,9965	0,9993	4,9980
<b>350</b>	1,9981	1,9965	0,0000	1,0064	2,9986	5,9944	1,9973	5,0098
<b>351</b>	1,0016	1,0009	0,0000	1,9969	4,1133	5,9965	1,9970	4,9963
<b>352</b>	1,0028	0,9992	0,9993	0,9997	4,0204	4,9963	0,9992	4,9980
<b>353</b>	1,9986	0,9981	0,9988	0,9993	3,9979	57,7444	1,9978	6,0162
<b>354</b>	2,0005	1,0009	0,9993	1,0036	2,9982	5,1015	1,9973	5,9961
<b>355</b>	0,9977	2,9970	0,9993	2,0104	3,9967	5,4354	1,9970	4,9940
<b>356</b>	0,9996	1,0005	0,0000	1,0016	3,9963	4,6431	1,9993	3,9967
<b>357</b>	2,0025	0,9989	0,0000	1,9974	4,3057	5,9940	1,9986	4,9975

<b>358</b>	1,0037	0,9997	1,0005	1,0024	3,9975	5,5369	1,9981	4,9983
<b>359</b>	0,9981	0,9989	0,9989	0,9996	1,9993	4,9964	1,9974	4,9968
<b>360</b>	1,0040	1,9977	0,9993	1,3529	1,9973	5,8182	0,9985	5,0146
<b>361</b>	3,0006	0,9997	0,9985	1,0001	2,9974	5,6491	2,1270	4,9991
<b>362</b>	0,9977	1,9981	0,9981	3,0002	2,9994	5,0141	1,9970	4,9963
<b>363</b>	0,9996	0,9992	0,9997	1,0017	1,9998	5,7309	1,9985	4,9964
<b>364</b>	1,0052	0,9989	0,9988	2,0408	3,0018	4,9960	1,9997	4,9948
<b>365</b>	1,6571	0,9996	0,9981	1,9977	3,0199	5,9940	1,9977	5,0731
<b>366</b>	1,1786	1,9974	0,9993	1,0028	4,1892	7,0163	1,9974	4,9999
<b>367</b>	0,9993	0,9989	0,9992	1,0028	2,9970	6,7136	1,9973	4,0121
<b>368</b>	2,0013	0,9993	0,9996	1,0068	3,1235	5,9937	1,9978	5,0011
<b>369</b>	2,0010	1,9982	0,9985	1,0036	2,9986	5,5570	1,9982	4,9466
<b>370</b>	1,1316	0,9988	0,9993	0,9992	2,0009	21,0918	1,9981	3,9971
<b>371</b>	1,0017	0,9993	0,9988	0,9993	3,0184	31,6859	0,9902	4,9987
<b>372</b>	1,0024	1,9985	0,9989	2,0009	3,9971	60,7897	0,9989	2,7497
<b>373</b>	0,9988	1,9978	0,9993	2,0871	3,9963	37,3362	0,9980	1,9966
<b>374</b>	0,9997	0,9993	0,0000	1,8149	3,9991	16,0283	1,9990	1,9977
<b>375</b>	1,0029	1,9977	0,9985	1,0012	4,0433	34,1389	1,9961	1,9973
<b>376</b>	1,1696	0,9993	0,0000	0,9988	3,9967	63,5346	2,0168	2,2688
<b>377</b>	1,9969	1,9981	0,9993	1,0008	4,2180	44,6512	1,9974	2,1835
<b>378</b>	0,9993	1,9982	1,0001	0,9989	4,1812	5,2583	2,9978	1,9994
<b>379</b>	1,1328	1,9986	0,0000	1,9989	3,9963	8,9923	1,9970	2,0044
<b>380</b>	1,3703	1,9981	0,0000	2,0013	4,1243	8,9926	0,9988	1,9981
<b>381</b>	0,9989	0,9997	0,9985	2,0021	2,9990	6,9937	1,9981	1,9970
<b>382</b>	1,9986	0,9988	0,9992	0,9993	2,9855	5,9945	0,9980	1,9973
<b>383</b>	0,9981	0,9989	0,0000	1,0028	2,9970	5,9948	1,9993	1,9985
<b>384</b>	0,9993	1,9984	1,0001	2,1886	3,9963	6,0031	1,9978	1,9986

**Elaborado por:** Jayron Silva, Anjelo Minango

## RECOPIACIÓN DE DATOS

### DAPPER MÉTODO INSERTAR

**Tabla 29.** Datos DAPPER Insertar

DAPPER								
Insertar								
N°	Código				Jmeter			
	Tiempo	CPU	Disco	Memoria	Tiempo	CPU	Disco	Memoria
1	20:08:55	19,50461	10,24128	58,11665	20:08:55.0	27.827	0.0	62.922
2	20:08:56	24,76521	15,85386	58,1008	20:08:56.0	25.124	0.0	62.934
3	20:08:57	24,10485	3,381523	58,1063	20:08:57.0	23.123	0.0	62.97
4	20:08:58	19,30769	2,859813	58,08633	20:08:58.0	24.285	0.0	63.023
5	20:08:59	26,6412	0,137712	58,12167	20:08:59.0	16.33	0.0	63.019
6	20:09:00	21,96278	0,202892	58,12689	20:09:00.0	26.487	0.0	63.039
7	20:09:01	23,32436	4,527608	58,1156	20:09:01.0	23.206	0.0	63.041
8	20:09:02	23,90972	3,175295	58,11716	20:09:02.0	22.505	0.0	63.045
9	20:09:03	18,83685	19,92408	58,11558	20:09:03.0	23.382	0.0	63.051
10	20:09:04	23,51912	0	58,10596	20:09:04.0	22.975	0.0	63.05
11	20:09:05	20,39805	3,213986	58,11256	20:09:05.0	21.989	1.0	63.044
12	20:09:06	23,51955	5,68595	58,093	20:09:06.0	19.618	0.0	63.066
13	20:09:07	24,69016	3,503681	58,09594	20:09:07.0	22.556	0.0	63.05
14	20:09:08	20,20283	0,474021	58,10859	20:09:08.0	23.984	0.0	63.044
15	20:09:09	32,49437	1,618632	58,33936	20:09:09.0	21.153	0.0	63.04
16	20:09:10	38,01899	10,75507	58,34678	20:09:10.0	33.412	0.0	63.658
17	20:09:11	37,5673	0	58,63566	20:09:11.0	38.501	0.0	63.858
18	20:09:12	39,18851	0,058218	58,85337	20:09:12.0	39.305	0.0	64.287
19	20:09:13	26,83626	5,742712	58,60046	20:09:13.0	38.68	0.0	64.625
20	20:09:14	20,86712	17,1972	58,60402	20:09:14.0	25.251	0.0	64.134
21	20:09:15	21,95882	1,793294	58,594	20:09:15.0	20.134	0.0	64.053
22	20:09:16	25,4706	7,789401	58,60153	20:09:16.0	21.267	1.0	64.049
23	20:09:17	20,59305	4,046276	58,59187	20:09:17.0	26.254	0.0	64.001
24	20:09:18	20,78813	0	58,6076	20:09:18.0	21.475	0.0	64.003
25	20:09:19	18,64598	3,415887	58,58438	20:09:19.0	20.912	0.0	64.001
26	20:09:20	24,29998	5,338971	58,58764	20:09:20.0	19.104	0.0	63.998
27	20:09:21	21,25687	3,622466	58,34381	20:09:21.0	24.192	0.0	63.994
28	20:09:22	21,56857	0,327459	58,288	20:09:22.0	21.08	0.0	63.55
29	20:09:23	23,12937	6,047071	58,28872	20:09:23.0	22.45	0.0	63.471
30	20:09:24	24,69001	3,001456	58,30632	20:09:24.0	23.013	0.0	63.465
31	20:09:25	20,02833	0,590284	58,3027	20:09:25.0	24.404	0.0	63.46
32	20:09:26	20,39802	5,400818	58,29376	20:09:26.0	19.308	0.0	63.459
33	20:09:27	21,84157	0,319557	58,28025	20:09:27.0	20.979	0.0	63.451
34	20:09:28	21,1416	0	58,28417	20:09:28.0	22.35	0.0	63.441
35	20:09:29	21,56861	1,215195	58,28594	20:09:29.0	21.946	0.0	63.436
36	20:09:30	19,42276	9,205381	58,26183	20:09:30.0	22.186	0.0	63.436
37	20:09:31	20,29823	7,532746	58,22417	20:09:31.0	19.688	0.0	63.431



38	20:09:32	20,4773	71,46231	58,18356	20:09:32.0	19.537	0.0	63.427
39	20:09:33	18,0564	87,83496	58,15025	20:09:33.0	21.259	1.0	63.377
40	20:09:34	21,64697	8,633087	58,12526	20:09:34.0	18.344	1.0	63.372
41	20:09:35	16,57904	6,50511	58,1156	20:09:35.0	17.741	1.0	63.366
42	20:09:36	21,95878	85,10052	58,08133	20:09:36.0	19.093	1.0	63.298
43	20:09:37	22,03655	41,38999	58,05931	20:09:37.0	23.089	2.0	63.287
44	20:09:39	23,98611	27,83973	58,0176	20:09:39.0	22.84	0.0	63.211
45	20:09:40	24,76521	53,69435	57,98249	20:09:40.0	25.526	1.0	63.145
46	20:09:41	22,58717	7,129953	57,97391	20:09:41.0	23.409	0.0	63.131
47	20:09:42	22,81609	35,82306	57,97432	20:09:42.0	19.683	1.0	63.123
48	20:09:43	21,17837	44,92468	57,96939	20:09:43.0	20.264	2.0	63.119
49	20:09:44	17,9434	16,4303	57,97965	20:09:44.0	21.887	0.0	63.117
50	20:09:45	18,33331	8,162912	57,97365	20:09:45.0	18.476	0.0	63.113
51	20:09:46	19,89289	39,17894	57,97157	20:09:46.0	20.622	1.0	63.109
52	20:09:47	17,94333	50,32372	57,97731	20:09:47.0	16.579	0.0	63.093
53	20:09:48	17,74858	42,04482	57,97171	20:09:48.0	20.42	0.0	63.066
54	20:09:49	17,90915	36,53849	57,97642	20:09:49.0	17.163	0.0	63.043
55	20:09:50	15,79937	23,72881	57,97661	20:09:50.0	16.167	0.0	63.043
56	20:09:51	17,49036	8,057557	57,98876	20:09:51.0	18.884	0.0	63.029
57	20:09:52	22,5871	14,51545	57,98317	20:09:52.0	17.536	1.0	63.028
58	20:09:53	15,99425	8,645037	57,97566	20:09:53.0	20.067	0.0	63.028
59	20:09:54	21,5301	9,002208	57,97126	20:09:54.0	19.835	0.0	63.028
60	20:09:55	17,52278	57,71391	57,97382	20:09:55.0	17.741	2.0	63.028
61	20:09:56	21,2407	32,07736	57,97269	20:09:56.0	18.079	1.0	63.028
62	20:09:57	19,22724	20,52905	57,97542	20:09:57.0	23.222	0.0	63.027
63	20:09:58	21,06188	9,039682	57,98281	20:09:58.0	19.472	0.0	63.027
64	20:09:59	19,98761	19,72686	57,98714	20:09:59.0	18.352	0.0	63.027
65	20:10:00	17,47151	14,05198	57,98778	20:10:00.0	19.266	0.0	63.026
66	20:10:01	18,67781	10,87933	57,99414	20:10:01.0	20.144	0.0	63.024
67	20:10:02	16,69136	29,53006	57,98266	20:10:02.0	18.737	0.0	63.023
68	20:10:03	18,08026	116,8044	57,96521	20:10:03.0	15.965	1.0	63.028
69	20:10:04	18,64197	60,21438	57,97467	20:10:04.0	17.163	1.0	63.027
70	20:10:05	17,55365	24,39018	57,97604	20:10:05.0	20.095	0.0	63.026
71	20:10:06	20,67614	15,54411	57,97417	20:10:06.0	16.416	0.0	63.017
72	20:10:07	20,08745	8,128811	57,97197	20:10:07.0	20.827	0.0	63.013
73	20:10:08	18,05678	67,59228	57,96576	20:10:08.0	19.732	1.0	63.012
74	20:10:09	19,81293	45,65361	57,96657	20:10:09.0	19.838	0.0	63.012
75	20:10:10	20,08747	57,51521	57,96655	20:10:10.0	17.597	0.0	63.011
76	20:10:11	18,05669	18,09085	57,96834	20:10:11.0	19.935	2.0	63.011
77	20:10:12	20,98318	98,62148	57,97109	20:10:12.0	18.819	1.0	63.009
78	20:10:13	17,83855	63,78599	57,96827	20:10:13.0	20.716	1.0	63.009
79	20:10:14	17,85976	20,16813	57,96719	20:10:14.0	18.148	0.0	63.009
80	20:10:15	19,03233	15,4277	57,9719	20:10:15.0	17.762	0.0	63.008
81	20:10:16	22,70817	29,12729	57,957	20:10:16.0	19.962	2.0	63.009
82	20:10:17	17,47141	34,04432	57,97286	20:10:17.0	21.484	0.0	63.01

83	20:10:18	18,83698	11,86497	57,97009	20:10:18.0	18.303	0.0	63.009
84	20:10:19	18,44696	22,43214	57,97575	20:10:19.0	18.725	0.0	63.009
85	20:10:20	20,20279	18,22853	57,96602	20:10:20.0	18.856	0.0	63.009
86	20:10:21	19,11294	61,05687	57,96709	20:10:21.0	20.322	0.0	63.008
87	20:10:22	16,88608	23,52506	57,96339	20:10:22.0	19.048	0.0	63.007
88	20:10:24	17,08101	46,72388	57,96607	20:10:24.0	17.476	0.0	62.994
89	20:10:25	17,27625	34,72251	57,96523	20:10:25.0	15.475	0.0	63.006
90	20:10:26	16,1059	12,10634	57,95985	20:10:26.0	15.554	0.0	63.001
91	20:10:27	15,91042	29,79893	57,96862	20:10:27.0	17.525	1.0	63.001
92	20:10:28	16,17563	20,52046	57,96537	20:10:28.0	16.036	0.0	63.0
93	20:10:29	19,61742	17,38247	57,96394	20:10:29.0	20.231	0.0	62.996
94	20:10:30	17,53567	9,852936	57,96023	20:10:30.0	16.171	2.0	62.996
95	20:10:31	15,71551	36,11124	57,96583	20:10:31.0	16.854	1.0	62.994
96	20:10:32	17,27549	14,67749	57,95139	20:10:32.0	17.844	0.0	62.994
97	20:10:33	18,1383	77,46239	57,94968	20:10:33.0	17.307	1.0	62.993
98	20:10:34	15,13024	12,83505	57,94968	20:10:34.0	15.157	0.0	62.991
99	20:10:35	17,86169	36,74057	57,95583	20:10:35.0	17.852	0.0	62.99
100	20:10:36	18,25434	10,14836	57,9549	20:10:36.0	16.992	1.0	62.99
101	20:10:37	17,27886	8,187787	57,95646	20:10:37.0	18.128	0.0	62.99
102	20:10:38	16,18934	47,10542	57,9548	20:10:38.0	17.865	1.0	62.989
103	20:10:39	16,69666	79,33904	57,95872	20:10:39.0	16.85	0.0	62.989
104	20:10:40	15,01974	8,007163	57,94997	20:10:40.0	14.775	0.0	62.989
105	20:10:41	18,05672	10,48611	57,94804	20:10:41.0	15.8	0.0	62.989
106	20:10:42	15,71535	86,95206	57,94736	20:10:42.0	17.89	1.0	62.988
107	20:10:43	19,15202	46,37439	57,94624	20:10:43.0	17.658	0.0	62.988
108	20:10:44	14,82483	59,34283	57,94246	20:10:44.0	15.984	2.0	62.988
109	20:10:45	20,28259	17,24838	57,95136	20:10:45.0	19.522	0.0	62.986
110	20:10:46	24,10483	54,65546	57,94641	20:10:46.0	19.239	1.0	62.985
111	20:10:47	21,56858	43,12826	57,9532	20:10:47.0	20.917	0.0	62.984
112	20:10:48	22,73917	69,79197	57,94376	20:10:48.0	23.124	0.0	62.981
113	20:10:49	20,00765	10,59621	57,93515	20:10:49.0	22.304	0.0	62.98
114	20:10:50	21,55678	32,09829	58,06053	20:10:50.0	20.695	0.0	62.979
115	20:10:51	23,1294	33,57471	58,26968	20:10:51.0	25.453	0.0	63.348
116	20:10:52	23,59596	0	58,25081	20:10:52.0	21.97	0.0	63.4
117	20:10:53	23,98552	3,17311	58,25894	20:10:53.0	22.111	0.0	63.374
118	20:10:54	22,15392	4,843558	58,24593	20:10:54.0	21.213	0.0	63.37
119	20:10:55	24,70547	15,51916	58,2401	20:10:55.0	23.259	0.0	63.35
120	20:10:56	26,39843	9,990663	58,24356	20:10:56.0	25.612	0.0	63.362
121	20:10:57	27,03127	2,077795	58,24624	20:10:57.0	28.633	0.0	63.336
122	20:10:58	28,80214	0,399985	58,24524	20:10:58.0	31.446	0.0	63.374
123	20:10:59	28,6633	3,143304	58,26346	20:10:59.0	26.058	0.0	63.362
124	20:11:00	32,56166	27,85394	58,30292	20:11:00.0	30.098	0.0	63.52
125	20:11:01	28,85828	7,432259	58,29249	20:11:01.0	28.438	0.0	63.501
126	20:11:02	27,86344	0,73488	58,29639	20:11:02.0	30.756	0.0	63.489
127	20:11:03	27,29914	0,362848	58,294	20:11:03.0	26.132	0.0	63.483

128	20:11:04	26,32445	0	58,29933	20:11:04.0	28.181	0.0	63.473
129	20:11:05	26,05587	4,273168	58,29914	20:11:05.0	28.885	0.0	63.462
130	20:11:06	29,17754	5,795003	58,28695	20:11:06.0	24.646	0.0	63.475
131	20:11:07	27,61668	0	58,29654	20:11:07.0	25.186	0.0	63.462
132	20:11:08	27,29899	0	58,29778	20:11:08.0	26.64	0.0	63.454
133	20:11:09	26,25087	5,171371	58,29654	20:11:09.0	27.682	0.0	63.467
134	20:11:10	29,76282	0	58,30184	20:11:10.0	26.302	0.0	63.456
135	20:11:11	26,71435	0,49479	58,29106	20:11:11.0	28.506	0.0	63.468
136	20:11:12	29,56769	3,593118	58,29111	20:11:12.0	28.736	0.0	63.453
137	20:11:13	26,05597	0	58,28771	20:11:13.0	30.3	0.0	63.445
138	20:11:14	27,10413	0,565788	58,2967	20:11:14.0	25.083	0.0	63.456
139	20:11:15	26,32448	0,076458	58,28984	20:11:15.0	26.841	0.0	63.445
140	20:11:16	31,00229	6,653842	58,29254	20:11:16.0	25.292	0.0	63.442
141	20:11:17	33,34142	4,889874	58,2962	20:11:17.0	32.359	0.0	63.462
142	20:11:18	24,49506	0,887328	58,30706	20:11:18.0	32.297	0.0	63.453
143	20:11:19	25,73981	0	58,30328	20:11:19.0	26.712	0.0	63.455
144	20:11:20	25,89311	2,491607	58,29469	20:11:20.0	24.375	0.0	63.447
145	20:11:21	24,57033	4,958648	58,29144	20:11:21.0	26.012	0.0	63.441
146	20:11:22	27,10417	11,23372	58,2868	20:11:22.0	24.263	0.0	63.446
147	20:11:23	28,46853	1,654742	58,28826	20:11:23.0	26.766	0.0	63.439
148	20:11:24	28,07869	0	58,28606	20:11:24.0	28.53	0.0	63.432
149	20:11:25	31,71382	6,468516	58,30397	20:11:25.0	26.599	0.0	63.449
150	20:11:26	33,74133	0,204481	58,28441	20:11:26.0	33.316	0.0	63.433
151	20:11:27	34,3813	0,355034	58,28759	20:11:27.0	33.398	0.0	63.425
152	20:11:28	32,10435	4,655987	58,28477	20:11:28.0	34.262	1.0	63.436
153	20:11:29	36,06994	5,06162	58,28273	20:11:29.0	31.707	0.0	63.419
154	20:11:30	34,12083	25,35589	58,28924	20:11:30.0	35.942	0.0	63.438
155	20:11:31	36,2016	3,80233	58,27862	20:11:31.0	33.864	0.0	63.426
156	20:11:32	28,8761	12,39065	58,27915	20:11:32.0	35.52	0.0	63.447
157	20:11:33	30,15288	44,77655	58,25007	20:11:33.0	28.091	0.0	63.434
158	20:11:34	31,90926	14,81331	58,23295	20:11:34.0	30.318	1.0	63.42
159	20:11:35	33,73091	20,90479	58,19789	20:11:35.0	31.782	0.0	63.403
160	20:11:36	31,00228	6,141629	58,16494	20:11:36.0	33.065	0.0	63.397
161	20:11:37	29,76293	9,798286	58,13657	20:11:37.0	30.451	0.0	63.38
162	20:11:38	31,32375	5,446651	58,10878	20:11:38.0	28.847	0.0	63.339
163	20:11:39	28,78726	11,02409	58,0925	20:11:39.0	30.332	0.0	63.319
164	20:11:40	31,51887	15,0051	58,0622	20:11:40.0	29.835	0.0	63.305
165	20:11:41	32,68935	63,06006	58,03439	20:11:41.0	31.724	0.0	63.252
166	20:11:42	33,46991	30,5437	58,00533	20:11:42.0	29.833	0.0	63.235
167	20:11:44	31,9089	11,90309	57,96611	20:11:44.0	32.905	0.0	63.13
168	20:11:45	31,78254	29,05686	57,97052	20:11:45.0	30.659	0.0	63.115
169	20:11:46	31,12852	5,548112	57,96977	20:11:46.0	31.274	1.0	63.097
170	20:11:47	29,24817	5,686371	57,96047	20:11:47.0	28.042	0.0	63.078
171	20:11:48	28,85812	5,953504	57,96033	20:11:48.0	32.297	0.0	63.055
172	20:11:49	17,47135	10,67659	57,9696	20:11:49.0	17.542	1.0	63.063

173	20:11:50	16,49586	8,727335	57,96097	20:11:50.0	16.365	0.0	63.062
174	20:11:51	21,37375	6,365583	57,97173	20:11:51.0	18.33	0.0	63.06
175	20:11:52	18,25169	46,90084	57,95181	20:11:52.0	22.424	0.0	63.058
176	20:11:53	21,6467	26,26651	57,95669	20:11:53.0	18.866	0.0	63.054
177	20:11:54	22,42617	26,59548	57,95935	20:11:54.0	26.129	0.0	63.053
178	20:11:55	23,4008	8,059224	57,96994	20:11:55.0	22.367	0.0	63.052
179	20:11:56	19,47832	45,72319	57,95724	20:11:56.0	18.707	0.0	63.051
180	20:11:57	17,08101	42,65409	57,96119	20:11:57.0	17.607	1.0	63.05
181	20:11:58	17,35857	24,22512	57,96164	20:11:58.0	18.775	0.0	63.05
182	20:11:59	19,30789	81,70592	57,97575	20:11:59.0	15.778	1.0	63.049
183	20:12:00	16,91188	59,34539	57,96251	20:12:00.0	19.066	2.0	63.047
184	20:12:01	16,57891	72,20376	57,95794	20:12:01.0	16.955	1.0	63.046
185	20:12:02	22,59368	36,77975	57,9532	20:12:02.0	22.601	0.0	63.045
186	20:12:03	18,64191	4,638517	57,96112	20:12:03.0	17.377	0.0	63.045
187	20:12:04	16,77476	15,59791	57,95495	20:12:04.0	19.364	0.0	63.043
188	20:12:05	17,27634	9,409015	57,95564	20:12:05.0	16.779	1.0	63.043
189	20:12:06	19,69751	11,50218	57,9494	20:12:06.0	18.737	0.0	63.038
190	20:12:07	16,77405	16,87872	57,94973	20:12:07.0	17.143	0.0	63.038
191	20:12:08	17,47125	14,79184	57,95208	20:12:08.0	18.35	0.0	63.034
192	20:12:09	16,69123	75,18538	57,95002	20:12:09.0	16.558	2.0	63.034
193	20:12:10	18,83716	30,03926	57,94921	20:12:10.0	16.726	0.0	63.034
194	20:12:11	14,78216	54,49484	57,95265	20:12:11.0	17.503	1.0	63.033
195	20:12:12	18,22813	22,90053	57,95614	20:12:12.0	17.624	1.0	63.033
196	20:12:13	26,7147	41,06234	57,93945	20:12:13.0	20.231	0.0	63.165
197	20:12:14	29,05328	39,44919	57,9467	20:12:14.0	29.716	0.0	63.052
198	20:12:15	19,48018	53,16143	57,95449	20:12:15.0	24.928	0.0	63.007
199	20:12:16	20,86698	16,98751	57,95512	20:12:16.0	20.722	3.0	62.39
200	20:12:17	20,23705	80,29793	57,95872	20:12:17.0	19.678	0.0	62.458
201	20:12:18	19,0765	34,15448	57,956	20:12:18.0	20.529	0.0	62.457
202	20:12:19	17,71371	60,78068	57,96482	20:12:19.0	16.966	2.0	62.456
203	20:12:20	18,13838	18,61678	57,96117	20:12:20.0	18.901	1.0	62.455
204	20:12:21	19,11295	68,00513	57,95803	20:12:21.0	17.95	0.0	62.453
205	20:12:22	16,69127	16,59588	57,95292	20:12:22.0	18.564	0.0	62.452
206	20:12:23	16,38427	12,8754	57,95459	20:12:23.0	17.947	0.0	62.452
207	20:12:24	18,42481	10,50708	57,95411	20:12:24.0	14.895	0.0	62.452
208	20:12:25	16,88607	11,05448	57,95786	20:12:25.0	17.908	0.0	62.452
209	20:12:26	17,55387	10,16788	57,95263	20:12:26.0	17.107	1.0	62.457
210	20:12:27	15,74203	72,60084	57,95825	20:12:27.0	16.589	3.0	62.452
211	20:12:28	17,7485	66,09378	57,95727	20:12:28.0	17.32	0.0	62.449
212	20:12:29	15,02017	18,37388	57,95241	20:12:29.0	16.149	0.0	62.447
213	20:12:30	19,50283	16,79838	57,95478	20:12:30.0	16.568	0.0	62.446
214	20:12:31	18,458	8,362646	57,95294	20:12:31.0	18.496	0.0	62.446
215	20:12:32	17,08115	22,05245	57,95803	20:12:32.0	18.014	0.0	62.445
216	20:12:33	15,91113	26,7978	57,95256	20:12:33.0	16.832	0.0	62.445
217	20:12:34	18,25169	8,956779	57,95916	20:12:34.0	16.211	0.0	62.445

218	20:12:35	18,52826	56,62054	57,9522	20:12:35.0	18.458	1.0	62.448
219	20:12:36	18,44688	32,52786	57,94913	20:12:36.0	18.851	0.0	62.448
220	20:12:37	17,47138	28,06172	57,94655	20:12:37.0	17.974	0.0	62.448
221	20:12:38	16,8861	12,43151	57,94763	20:12:38.0	17.575	1.0	62.447
222	20:12:39	15,32864	10,87047	57,94299	20:12:39.0	16.6	1.0	62.446
223	20:12:40	15,53638	11,20118	57,94849	20:12:40.0	15.468	1.0	62.443
224	20:12:41	16,18922	13,40255	57,94823	20:12:41.0	15.562	1.0	62.443
225	20:12:42	18,25191	8,303996	57,94947	20:12:42.0	16.214	0.0	62.442
226	20:12:43	16,73176	25,99687	57,93833	20:12:43.0	17.716	1.0	62.441
227	20:12:44	19,07731	23,93959	57,94297	20:12:44.0	16.751	0.0	62.439
228	20:12:45	18,25176	69,79595	57,95158	20:12:45.0	18.497	2.0	62.44
229	20:12:46	20,28232	10,3061	58,00311	20:12:46.0	17.328	1.0	62.44
230	20:12:48	16,77355	16,35908	57,99761	20:12:48.0	16.589	0.0	62.486
231	20:12:49	15,99434	21,16765	57,9951	20:12:49.0	17.139	0.0	62.487
232	20:12:50	20,32575	9,614686	58,11986	20:12:50.0	15.011	0.0	62.488
233	20:12:51	31,78204	5,908931	58,3115	20:12:51.0	32.991	0.0	62.863
234	20:12:52	33,85963	40,30935	58,30885	20:12:52.0	35.949	1.0	62.908
235	20:12:53	35,03054	3,750921	58,31459	20:12:53.0	34.471	0.0	62.896
236	20:12:54	33,46997	13,18506	58,30395	20:12:54.0	31.36	0.0	62.937
237	20:12:55	34,38251	81,54684	58,31311	20:12:55.0	33.703	0.0	62.925
238	20:12:56	32,17184	2,487279	58,31083	20:12:56.0	30.249	0.0	62.895
239	20:12:57	29,17745	8,327247	58,30646	20:12:57.0	29.334	0.0	62.875
240	20:12:58	40,55291	0	58,31679	20:12:58.0	42.107	0.0	62.923
241	20:12:59	38,60375	0,456711	58,32088	20:12:59.0	38.365	0.0	62.914
242	20:13:00	44,25626	49,6742	58,37528	20:13:00.0	41.106	2.0	62.983
243	20:13:01	45,81551	27,77244	58,3864	20:13:01.0	38.369	2.0	63.357
244	20:13:02	37,23938	28,8109	58,39594	20:13:02.0	41.629	3.0	63.491
245	20:13:03	31,39229	27,78025	58,38719	20:13:03.0	35.648	3.0	63.53
246	20:13:04	37,82411	55,18003	58,40338	20:13:04.0	35.814	6.0	63.549
247	20:13:05	37,4343	32,80264	58,40962	20:13:05.0	40.393	3.0	63.343
248	20:13:06	37,7622	23,47807	58,41168	20:13:06.0	34.684	1.0	63.302
249	20:13:07	47,37451	19,21072	58,45939	20:13:07.0	35.429	1.0	63.398
250	20:13:08	46,64832	26,8372	58,48043	20:13:08.0	52.451	3.0	63.533
251	20:13:09	37,37202	23,25185	58,48679	20:13:09.0	40.155	2.0	63.549
252	20:13:10	32,9513	247,0288	58,49074	20:13:10.0	37.493	3.0	63.581
253	20:13:11	33,92602	148,1924	58,50478	20:13:11.0	33.539	3.0	63.634
254	20:13:12	33,92607	141,0385	58,53756	20:13:12.0	32.508	2.0	63.696
255	20:13:13	40,68865	281,2287	58,55454	20:13:13.0	33.217	1.0	63.795
256	20:13:14	40,35795	113,375	58,5919	20:13:14.0	40.34	0.0	63.828
257	20:13:15	38,54255	16,87564	58,60572	20:13:15.0	40.893	1.0	63.882
258	20:13:16	36,84957	6,940279	58,60717	20:13:16.0	36.729	0.0	63.75
259	20:13:17	34,44525	29,93677	58,6001	20:13:17.0	40.633	0.0	63.473
260	20:13:18	30,93352	3,774328	58,59579	20:13:18.0	30.293	0.0	63.457
261	20:13:19	35,68061	0,252096	58,59245	20:13:19.0	30.774	0.0	63.45
262	20:13:20	31,51884	7,299793	58,59507	20:13:20.0	34.564	0.0	63.473

263	20:13:21	32,8846	0	58,57905	20:13:21.0	30.624	0.0	63.457
264	20:13:22	32,7565	0,647489	58,58513	20:13:22.0	34.295	0.0	63.468
265	20:13:23	29,17747	0	58,59388	20:13:23.0	32.685	0.0	63.452
266	20:13:24	31,71372	0,482284	58,56635	20:13:24.0	30.549	0.0	63.475
267	20:13:25	36,65472	19,89983	58,55978	20:13:25.0	29.509	0.0	63.443
268	20:13:26	31,71388	0,081982	58,56057	20:13:26.0	36.295	0.0	63.435
269	20:13:27	38,15226	4,620295	58,56657	20:13:27.0	32.754	0.0	63.415
270	20:13:28	32,50129	0,260291	58,56439	20:13:28.0	37.15	0.0	63.439
271	20:13:29	30,8074	2,344444	58,556	20:13:29.0	31.055	0.0	63.423
272	20:13:30	32,56174	0	58,56353	20:13:30.0	32.318	0.0	63.428
273	20:13:31	33,66494	8,630967	58,55507	20:13:31.0	32.701	1.0	63.414
274	20:13:32	30,3483	0,405824	58,55956	20:13:32.0	32.229	0.0	63.396
275	20:13:33	34,12085	0,393098	58,54	20:13:33.0	30.431	1.0	63.417
276	20:13:34	33,53658	0	58,55791	20:13:34.0	33.707	0.0	63.4
277	20:13:35	32,88463	0	58,55402	20:13:35.0	33.087	0.0	63.419
278	20:13:36	40,74777	2,335388	58,57396	20:13:36.0	33.246	0.0	63.401
279	20:13:37	31,97678	21,08228	58,54462	20:13:37.0	37.579	0.0	63.395
280	20:13:38	33,92601	7,403239	58,5235	20:13:38.0	35.839	0.0	63.406
281	20:13:39	34,83563	9,755528	58,49057	20:13:39.0	34.014	0.0	63.415
282	20:13:40	31,58701	14,86131	58,44387	20:13:40.0	34.879	0.0	63.401
283	20:13:41	31,97659	28,36025	58,4068	20:13:41.0	31.619	0.0	63.358
284	20:13:42	33,27479	10,55125	58,37002	20:13:42.0	32.06	1.0	63.339
285	20:13:43	29,83289	6,179246	58,34776	20:13:43.0	31.199	1.0	63.272
286	20:13:44	32,36665	6,263406	58,33104	20:13:44.0	28.311	0.0	63.25
287	20:13:45	37,23939	5,219403	58,31268	20:13:45.0	33.506	0.0	63.229
288	20:13:46	33,53616	27,14242	58,25975	20:13:46.0	37.608	0.0	63.211
289	20:13:47	33,5358	77,45898	58,24789	20:13:47.0	35.018	1.0	63.155
290	20:13:49	38,40895	227,5038	58,22393	20:13:49.0	38.841	0.0	63.119
291	20:13:50	30,15303	33,19131	58,21659	20:13:50.0	30.101	0.0	63.102
292	20:13:51	29,24814	7,382597	58,21465	20:13:51.0	31.225	0.0	63.077
293	20:13:52	28,85829	27,96248	58,21078	20:13:52.0	27.753	1.0	63.043
294	20:13:53	27,49404	37,45545	58,21439	20:13:53.0	27.241	1.0	63.015
295	20:13:54	26,71435	6,886912	58,2147	20:13:54.0	27.862	0.0	63.014
296	20:13:55	30,34821	5,0488	58,21513	20:13:55.0	30.536	0.0	63.011
297	20:13:56	24,76524	35,45143	58,20731	20:13:56.0	29.278	0.0	63.009
298	20:13:57	14,43501	23,35696	58,2064	20:13:57.0	15.187	1.0	63.007
299	20:13:58	19,8927	40,75585	58,20332	20:13:58.0	17.149	1.0	63.006
300	20:13:59	27,4217	13,06327	58,39853	20:13:59.0	21.569	0.0	63.095
301	20:14:00	18,52603	49,03867	58,21126	20:14:00.0	26.135	0.0	60.336
302	20:14:01	19,03287	26,19512	58,21083	20:14:01.0	17.566	1.0	61.377
303	20:14:02	18,25196	6,972144	58,21028	20:14:02.0	19.683	0.0	61.533
304	20:14:03	18,13833	4,863803	58,21692	20:14:03.0	16.793	0.0	61.559
305	20:14:04	19,89236	28,84611	58,22006	20:14:04.0	22.266	0.0	61.57
306	20:14:05	26,05582	5,604193	58,22003	20:14:05.0	19.242	0.0	61.567
307	20:14:06	29,05323	57,77312	58,20784	20:14:06.0	24.297	0.0	61.645

308	20:14:07	23,47753	66,65067	58,21843	20:14:07.0	30.073	0.0	61.643
309	20:14:08	26,65121	12,72896	58,21348	20:14:08.0	24.904	0.0	61.64
310	20:14:09	20,00774	27,36434	58,21678	20:14:09.0	25.666	0.0	61.639
311	20:14:10	18,13821	17,10858	58,21884	20:14:10.0	19.119	0.0	61.641
312	20:14:11	16,31467	36,48969	58,2186	20:14:11.0	16.957	0.0	61.642
313	20:14:12	16,18929	11,70458	58,21389	20:14:12.0	16.275	0.0	61.643
314	20:14:13	16,77404	11,35089	58,20571	20:14:13.0	15.816	0.0	61.642
315	20:14:14	16,10553	8,431255	58,20544	20:14:14.0	16.113	0.0	61.644
316	20:14:15	22,9343	123,6779	58,02219	20:14:15.0	17.047	2.0	61.647
317	20:14:16	24,76405	62,50536	58,04424	20:14:16.0	26.168	2.0	61.343
318	20:14:17	21,06202	57,62548	58,01908	20:14:17.0	22.154	0.0	61.343
319	20:14:18	16,1056	7,542951	58,02227	20:14:18.0	20.353	0.0	61.341
320	20:14:19	22,02969	8,092964	58,01653	20:14:19.0	16.527	0.0	61.34
321	20:14:20	19,69768	8,859379	58,0231	20:14:20.0	21.444	0.0	61.337
322	20:14:21	19,30778	101,9091	58,02011	20:14:21.0	21.08	0.0	61.336
323	20:14:22	19,62541	62,47915	58,01798	20:14:22.0	19.081	1.0	61.336
324	20:14:23	17,16393	49,1376	58,01815	20:14:23.0	18.909	1.0	61.335
325	20:14:24	17,86148	14,5113	58,02736	20:14:24.0	17.554	0.0	61.334
326	20:14:25	19,28593	58,06658	58,11041	20:14:25.0	18.103	0.0	61.334
327	20:14:26	18,86762	54,80463	58,11491	20:14:26.0	18.589	2.0	61.362
328	20:14:27	19,46974	106,0563	58,10898	20:14:27.0	20.501	1.0	61.398
329	20:14:28	20,00794	106,2447	58,10972	20:14:28.0	19.281	0.0	61.402
330	20:14:29	18,25162	14,20459	58,10814	20:14:29.0	19.857	0.0	61.406
331	20:14:30	16,10579	27,52443	58,02939	20:14:30.0	18.701	0.0	61.409
332	20:14:31	17,86226	13,53153	58,02186	20:14:31.0	16.182	0.0	61.379
333	20:14:32	16,33124	20,6235	58,01978	20:14:32.0	18.557	0.0	61.374
334	20:14:33	16,49599	10,46679	58,01392	20:14:33.0	16.593	0.0	61.372
335	20:14:34	16,88607	60,43728	58,01605	20:14:34.0	16.934	0.0	61.371
336	20:14:35	15,79993	75,33247	58,01722	20:14:35.0	16.785	1.0	61.37
337	20:14:36	16,37136	11,20839	58,01162	20:14:36.0	15.782	0.0	61.371
338	20:14:38	17,74849	20,91417	58,01332	20:14:38.0	16.778	0.0	61.369
339	20:14:39	19,6806	11,94078	58,01122	20:14:39.0	19.498	0.0	61.369
340	20:14:40	17,94353	7,529931	58,00906	20:14:40.0	17.772	0.0	61.369
341	20:14:41	14,63014	12,89464	58,00906	20:14:41.0	16.167	0.0	61.369
342	20:14:42	15,91079	14,21718	58,00734	20:14:42.0	15.587	0.0	61.368
343	20:14:43	20,08255	26,26311	58,00734	20:14:43.0	18.458	0.0	61.368
344	20:14:44	17,08101	55,76471	58,00497	20:14:44.0	19.119	0.0	61.368
345	20:14:45	15,44713	17,49162	58,00368	20:14:45.0	14.82	1.0	61.358
346	20:14:46	20,08755	27,84392	57,999	20:14:46.0	19.135	1.0	61.352
347	20:14:47	15,99447	16,97888	57,99474	20:14:47.0	17.977	0.0	61.351
348	20:14:48	18,83694	7,021628	57,99493	20:14:48.0	17.731	0.0	61.352
349	20:14:49	18,33289	36,7477	57,99223	20:14:49.0	19.858	0.0	61.362
350	20:14:50	25,93475	16,8888	58,28283	20:14:50.0	17.35	1.0	61.364
351	20:14:51	30,34807	9,887734	58,30684	20:14:51.0	31.909	0.0	61.762
352	20:14:52	33,22734	18,13951	58,30517	20:14:52.0	35.195	0.0	61.866

353	20:14:53	32,29916	5,404095	58,29673	20:14:53.0	31.679	0.0	61.86
354	20:14:54	32,56165	15,65937	58,31191	20:14:54.0	33.063	0.0	61.888
355	20:14:55	34,25024	5,649097	58,29821	20:14:55.0	31.031	0.0	61.926
356	20:14:56	33,92587	1,316888	58,29907	20:14:56.0	31.728	0.0	61.893
357	20:14:57	35,09542	27,41277	58,27834	20:14:57.0	36.358	0.0	61.911
358	20:14:58	35,48531	0,258992	58,29732	20:14:58.0	35.549	0.0	61.949
359	20:14:59	30,73837	2,199261	58,31803	20:14:59.0	35.877	0.0	61.935
360	20:15:00	35,48524	0,48403	58,30043	20:15:00.0	35.569	0.0	61.961
361	20:15:01	27,03131	16,30449	58,2972	20:15:01.0	29.173	0.0	61.942
362	20:15:02	36,78667	42,7541	58,30268	20:15:02.0	29.293	2.0	61.942
363	20:15:03	33,07952	4,145847	58,29383	20:15:03.0	33.592	0.0	61.97
364	20:15:04	29,56788	9,724059	58,29689	20:15:04.0	32.978	0.0	61.954
365	20:15:05	31,0024	1,22946	58,29912	20:15:05.0	30.415	0.0	61.935
366	20:15:06	31,5968	9,524383	58,30038	20:15:06.0	31.552	0.0	61.969
367	20:15:07	33,8601	0	58,30524	20:15:07.0	33.466	0.0	61.957
368	20:15:08	31,97686	60,84989	58,30548	20:15:08.0	31.973	2.0	61.948
369	20:15:09	33,14626	0,712147	58,30311	20:15:09.0	31.171	0.0	61.972
370	20:15:10	40,16302	0,381161	58,29914	20:15:10.0	33.242	0.0	61.963
371	20:15:11	45,81535	5,623463	58,29658	20:15:11.0	39.501	0.0	61.987
372	20:15:12	51,27284	0	58,25002	20:15:12.0	48.925	0.0	61.974
373	20:15:13	34,25043	2,137221	58,23101	20:15:13.0	49.04	0.0	61.927
374	20:15:14	38,15224	0,633511	58,23598	20:15:14.0	33.003	0.0	61.893
375	20:15:15	33,73095	0,18638	58,23871	20:15:15.0	41.161	0.0	61.876
376	20:15:16	36,51796	5,244464	58,25127	20:15:16.0	31.783	0.0	61.861
377	20:15:17	33,53621	2,819591	58,22972	20:15:17.0	36.746	0.0	61.875
378	20:15:18	29,63793	0	58,23436	20:15:18.0	33.122	0.0	61.861
379	20:15:19	30,15317	0,264636	58,24651	20:15:19.0	29.48	0.0	61.885
380	20:15:20	32,9513	0,315617	58,24662	20:15:20.0	30.225	0.0	61.866
381	20:15:21	35,02991	1,297492	58,23625	20:15:21.0	32.344	0.0	61.852
382	20:15:22	30,41762	27,75775	58,23376	20:15:22.0	34.472	0.0	61.868
383	20:15:23	34,51077	0	58,24586	20:15:23.0	31.134	0.0	61.855
384	20:15:24	34,90046	4,856093	58,24206	20:15:24.0	33.793	0.0	61.853

Elaborado por: Jayron Silva, Anjelo Minango

## MÉTODO MOSTRAR

Tabla 30. Datos DAPPER Mostrar

DAPPER								
Mostrar								
N°	Código				Jmeter			
	Tiempo	CPU	Disco	Memoria	Tiempo	CPU	Disco	Memoria
1	22:17:47	36,71231	80,20465	57,52483	22:17:47.0	47.771	0.0	56.679
2	22:17:48	33,27488	20,85221	57,52146	22:17:48.0	33.592	0.0	56.879
3	22:17:49	32,95148	1,649261	57,51527	22:17:49.0	34.676	0.0	57.014
4	22:17:50	25,14968	17,5452	57,53136	22:17:50.0	31.811	0.0	57.209



5	22:17:51	29,1957	0,19591	57,56795	22:17:51.0	24.853	0.0	57.348
6	22:17:52	26,8363	6,708213	57,52825	22:17:52.0	30.112	0.0	57.642
7	22:17:53	27,49404	15,66408	57,52208	22:17:53.0	25.823	0.0	57.767
8	22:17:54	25,11039	0,268811	57,53086	22:17:54.0	28.203	0.0	57.82
9	22:17:55	29,76287	6,2619	57,52512	22:17:55.0	25.406	1.0	57.979
10	22:17:56	25,93468	3,642487	57,52892	22:17:56.0	29.432	0.0	58.2
11	22:17:57	30,73836	16,51694	57,52901	22:17:57.0	26.84	0.0	58.418
12	22:17:58	27,42166	4,412364	57,53514	22:17:58.0	30.527	0.0	58.634
13	22:17:59	28,78728	0,193193	57,46856	22:17:59.0	28.541	0.0	58.829
14	22:18:00	24,37536	0,352932	57,4733	22:18:00.0	29.188	0.0	58.995
15	22:18:01	19,01833	3,068853	57,46363	22:18:01.0	23.135	0.0	59.152
16	22:18:02	26,25099	7,234758	57,46246	22:18:02.0	20.094	0.0	59.173
17	22:18:03	24,46394	4,020141	57,46392	22:18:03.0	25.973	0.0	59.364
18	22:18:04	19,50263	0	57,46638	22:18:04.0	24.268	0.0	59.443
19	22:18:05	23,5959	5,607844	57,46758	22:18:05.0	19.248	0.0	59.493
20	22:18:06	24,57039	4,423193	57,47421	22:18:06.0	24.122	0.0	59.634
21	22:18:07	19,15988	1,078389	57,46474	22:18:07.0	22.18	0.0	59.88
22	22:18:08	19,81262	7,96743	57,47595	22:18:08.0	20.406	0.0	60.021
23	22:18:09	22,54408	5,054853	57,47313	22:18:09.0	21.182	0.0	60.19
24	22:18:10	22,73907	4,429592	57,47614	22:18:10.0	21.09	0.0	60.367
25	22:18:11	23,40096	0,25112	57,47363	22:18:11.0	24.56	0.0	60.542
26	22:18:12	18,51282	0,21669	57,48358	22:18:12.0	24.33	0.0	60.757
27	22:18:13	24,76559	12,72581	57,47043	22:18:13.0	19.031	0.0	60.888
28	22:18:14	22,93432	0	57,47136	22:18:14.0	23.47	0.0	61.111
29	22:18:15	20,98368	5,873524	57,48726	22:18:15.0	20.844	0.0	61.081
30	22:18:16	19,22734	1,323829	57,48659	22:18:16.0	22.088	0.0	60.856
31	22:18:17	22,15364	1,855334	57,49489	22:18:17.0	22.052	0.0	60.908
32	22:18:18	17,86158	7,933636	57,48312	22:18:18.0	19.555	0.0	60.894
33	22:18:19	21,64676	2,820151	57,48951	22:18:19.0	21.434	0.0	60.906
34	22:18:20	20,20283	12,78402	57,48434	22:18:20.0	21.05	0.0	60.918
35	22:18:21	20,59304	19,95945	57,48057	22:18:21.0	20.42	0.0	60.915
36	22:18:23	23,94244	0	57,48616	22:18:23.0	20.959	0.0	60.902
37	22:18:24	18,2518	6,227247	57,465	22:18:24.0	18.569	0.0	60.905
38	22:18:25	20,4116	3,072842	57,50479	22:18:25.0	21.962	0.0	60.948
39	22:18:26	27,63366	3,010295	57,49173	22:18:26.0	25.062	0.0	60.988
40	22:18:27	21,45223	6,717953	57,45524	22:18:27.0	23.755	0.0	60.993
41	22:18:28	22,5444	15,55954	57,42384	22:18:28.0	23.897	0.0	60.987
42	22:18:29	19,11284	57,39351	57,35268	22:18:29.0	18.386	0.0	60.985
43	22:18:30	26,83634	6,383339	57,32281	22:18:30.0	23.181	0.0	60.894
44	22:18:31	22,2313	6,836222	57,28866	22:18:31.0	23.751	0.0	60.887
45	22:18:32	20,59316	51,28543	57,25589	22:18:32.0	20.539	0.0	60.884
46	22:18:33	17,74854	6,410511	57,2487	22:18:33.0	20.254	0.0	60.818
47	22:18:34	23,12925	20,99417	57,22591	22:18:34.0	21.33	0.0	60.81
48	22:18:35	20,59328	53,47721	57,18724	22:18:35.0	20.464	0.0	60.804
49	22:18:36	20,39783	13,99656	57,15137	22:18:36.0	21.818	0.0	60.74

50	22:18:37	17,16384	21,31874	57,1495	22:18:37.0	17.772	0.0	60.733
51	22:18:38	19,61744	6,974321	57,14675	22:18:38.0	17.338	0.0	60.727
52	22:18:39	16,49593	7,555686	57,13853	22:18:39.0	18.091	0.0	60.722
53	22:18:40	17,86162	54,91177	57,13991	22:18:40.0	18.825	2.0	60.71
54	22:18:41	20,00759	66,09869	57,14647	22:18:41.0	17.931	0.0	60.708
55	22:18:42	17,31955	20,57829	57,14886	22:18:42.0	16.719	0.0	60.677
56	22:18:43	16,13336	67,88843	57,14379	22:18:43.0	18.591	0.0	60.649
57	22:18:44	19,03222	33,54062	57,14883	22:18:44.0	18.692	0.0	60.627
58	22:18:45	18,72293	23,46104	57,15178	22:18:45.0	17.998	0.0	60.628
59	22:18:46	26,71475	7,466043	57,16603	22:18:46.0	20.719	0.0	60.824
60	22:18:47	18,44686	7,201264	57,13303	22:18:47.0	25.676	0.0	60.622
61	22:18:48	16,77388	19,61246	57,14113	22:18:48.0	15.803	1.0	60.615
62	22:18:49	22,07339	56,45932	57,13633	22:18:49.0	20.639	1.0	60.609
63	22:18:50	22,54397	6,717579	57,13341	22:18:50.0	22.223	0.0	60.601
64	22:18:51	15,91055	7,228902	57,12841	22:18:51.0	20.069	0.0	60.592
65	22:18:52	19,69754	7,448606	57,13166	22:18:52.0	17.806	0.0	60.584
66	22:18:53	19,50278	15,59599	57,13508	22:18:53.0	16.71	0.0	60.583
67	22:18:54	17,47141	13,26762	57,1292	22:18:54.0	21.899	0.0	60.576
68	22:18:55	20,60748	14,84047	57,13501	22:18:55.0	18.02	0.0	60.573
69	22:18:56	19,03252	87,2488	57,1336	22:18:56.0	18.934	0.0	60.565
70	22:18:57	18,44685	70,32386	57,11296	22:18:57.0	19.185	0.0	60.561
71	22:18:58	18,72301	40,50747	57,1357	22:18:58.0	17.699	0.0	60.559
72	22:18:59	19,22727	38,17057	57,14369	22:18:59.0	19.793	0.0	60.559
73	22:19:00	24,18051	10,56222	57,13326	22:19:00.0	19.902	0.0	60.56
74	22:19:01	19,61745	18,0552	57,13432	22:19:01.0	22.116	0.0	60.558
75	22:19:02	20,28243	8,046741	57,14027	22:19:02.0	21.73	0.0	60.556
76	22:19:03	24,57059	10,02176	57,14039	22:19:03.0	23.207	0.0	60.554
77	22:19:04	21,84167	41,1981	57,1363	22:19:04.0	22.55	0.0	60.554
78	22:19:05	21,34658	87,89439	57,1319	22:19:05.0	18.527	0.0	60.553
79	22:19:06	17,502	9,945223	57,13503	22:19:06.0	21.292	0.0	60.553
80	22:19:07	19,03228	66,41956	57,13876	22:19:07.0	18.287	1.0	60.552
81	22:19:08	18,33334	47,85273	57,12791	22:19:08.0	20.981	1.0	60.552
82	22:19:09	17,86201	48,99207	57,13867	22:19:09.0	16.098	1.0	60.551
83	22:19:10	19,89254	7,94797	57,14477	22:19:10.0	18.841	0.0	60.55
84	22:19:11	18,4469	43,59851	57,14273	22:19:11.0	21.679	0.0	60.549
85	22:19:12	20,59165	9,857752	57,14598	22:19:12.0	16.377	1.0	60.548
86	22:19:13	20,39793	79,41351	57,13762	22:19:13.0	20.651	0.0	60.547
87	22:19:14	17,47136	13,09693	57,14032	22:19:14.0	20.938	0.0	60.547
88	22:19:15	18,63885	20,20996	57,14304	22:19:15.0	18.071	0.0	60.546
89	22:19:16	17,27634	14,50309	57,1363	22:19:16.0	17.952	0.0	60.546
90	22:19:17	18,44696	8,730564	57,14137	22:19:17.0	17.34	1.0	60.545
91	22:19:18	16,88613	8,043472	57,15096	22:19:18.0	18.59	0.0	60.546
92	22:19:19	22,15403	21,80001	57,14508	22:19:19.0	17.313	0.0	60.545
93	22:19:20	19,89257	13,24179	57,13853	22:19:20.0	21.14	0.0	60.544
94	22:19:21	14,54474	68,69714	57,15419	22:19:21.0	20.195	0.0	60.545

95	22:19:22	19,50269	19,39011	57,143	22:19:22.0	15.168	1.0	60.543
96	22:19:23	18,91052	23,17833	57,15259	22:19:23.0	19.545	0.0	60.543
97	22:19:24	15,32514	38,56208	57,14878	22:19:24.0	18.947	0.0	60.542
98	22:19:25	18,52806	103,8836	57,15342	22:19:25.0	15.196	1.0	60.542
99	22:19:26	17,55371	108,917	57,14893	22:19:26.0	17.962	2.0	60.545
100	22:19:27	23,9852	42,15009	57,1384	22:19:27.0	17.185	1.0	60.544
101	22:19:28	17,55361	32,58117	57,1357	22:19:28.0	23.849	0.0	60.543
102	22:19:29	17,31322	14,16131	57,14075	22:19:29.0	17.652	0.0	60.543
103	22:19:30	19,50301	72,84964	57,15682	22:19:30.0	17.183	0.0	60.544
104	22:19:31	18,72316	19,15829	57,15103	22:19:31.0	19.333	1.0	60.541
105	22:19:32	17,55368	95,77882	57,16306	22:19:32.0	18.725	0.0	60.54
106	22:19:33	17,74865	14,79077	57,15921	22:19:33.0	17.99	0.0	60.538
107	22:19:34	16,57907	13,01691	57,15438	22:19:34.0	17.644	0.0	60.538
108	22:19:35	16,38433	10,84246	57,15118	22:19:35.0	16.271	0.0	60.538
109	22:19:36	16,69083	16,11281	57,14986	22:19:36.0	16.908	0.0	60.538
110	22:19:37	18,51491	36,67152	57,14515	22:19:37.0	16.597	0.0	60.542
111	22:19:38	14,43508	80,0806	57,14515	22:19:38.0	18.515	3.0	60.564
112	22:19:39	19,42234	41,64477	57,15985	22:19:39.0	15.435	2.0	60.563
113	22:19:40	18,05668	11,05767	57,15108	22:19:40.0	18.942	0.0	60.563
114	22:19:41	18,05669	24,63549	57,15347	22:19:41.0	18.523	0.0	60.563
115	22:19:42	16,88685	113,3079	57,18458	22:19:42.0	17.521	0.0	60.564
116	22:19:43	22,93432	4,81391	57,51871	22:19:43.0	17.729	1.0	60.565
117	22:19:44	23,32453	3,278869	57,69563	22:19:44.0	23.21	0.0	61.028
118	22:19:45	22,81614	4,508522	57,73269	22:19:45.0	24.781	0.0	61.33
119	22:19:46	20,20273	2,477454	57,7401	22:19:46.0	20.454	0.0	61.527
120	22:19:47	24,11594	3,059341	57,7562	22:19:47.0	19.735	0.0	61.583
121	22:19:49	21,37345	3,553746	57,76937	22:19:49.0	19.327	0.0	61.602
122	22:19:50	21,76364	9,588739	57,7628	22:19:50.0	20.319	0.0	61.625
123	22:19:51	21,37332	0,839301	57,75986	22:19:51.0	22.672	0.0	61.626
124	22:19:52	21,56839	4,676001	57,76488	22:19:52.0	22.585	0.0	61.611
125	22:19:53	20,9833	7,382032	57,76316	22:19:53.0	22.898	0.0	61.664
126	22:19:54	24,30002	3,814974	57,75935	22:19:54.0	22.904	0.0	61.66
127	22:19:55	23,0814	4,742995	57,7621	22:19:55.0	21.835	0.0	61.662
128	22:19:56	24,12145	0,818621	57,76328	22:19:56.0	21.814	0.0	61.661
129	22:19:57	20,86708	4,538596	57,76273	22:19:57.0	21.192	1.0	61.658
130	22:19:58	20,28237	0,512887	57,76244	22:19:58.0	24.723	0.0	61.66
131	22:19:59	23,71475	11,9188	57,76861	22:19:59.0	21.734	0.0	61.653
132	22:20:00	21,45184	2,881369	57,75794	22:20:00.0	20.499	0.0	61.682
133	22:20:01	27,00537	1,03993	57,75833	22:20:01.0	27.022	0.0	61.673
134	22:20:02	22,73917	0	57,75675	22:20:02.0	23.3	0.0	61.672
135	22:20:03	21,45247	0	57,75574	22:20:03.0	19.651	0.0	61.674
136	22:20:04	21,062	6,052392	57,75904	22:20:04.0	20.274	0.0	61.666
137	22:20:05	24,88654	0	57,7561	22:20:05.0	21.906	0.0	61.67
138	22:20:06	20,28228	22,39916	57,75484	22:20:06.0	23.786	0.0	61.668
139	22:20:07	24,37551	3,11904	57,76189	22:20:07.0	25.491	1.0	61.666

140	22:20:08	26,71432	0	57,76517	22:20:08.0	25.365	0.0	61.675
141	22:20:09	27,42164	8,703629	57,75381	22:20:09.0	24.153	0.0	61.67
142	22:20:10	25,27708	0	57,75127	22:20:10.0	24.581	0.0	61.665
143	22:20:11	24,18059	7,235403	57,75426	22:20:11.0	25.796	0.0	61.668
144	22:20:12	25,9348	1,484514	57,75814	22:20:12.0	26.852	0.0	61.664
145	22:20:13	25,12207	0	57,76187	22:20:13.0	24.276	0.0	61.66
146	22:20:14	21,37344	7,920421	57,75991	22:20:14.0	25.926	0.0	61.672
147	22:20:15	25,35001	0,8856	57,78198	22:20:15.0	23.132	0.0	61.665
148	22:20:16	26,25108	0	57,77763	22:20:16.0	23.947	0.0	61.67
149	22:20:17	24,48171	4,578568	57,77392	22:20:17.0	27.146	0.0	61.661
150	22:20:18	24,57033	0	57,77363	22:20:18.0	22.694	0.0	61.655
151	22:20:19	28,09014	27,86938	57,76466	22:20:19.0	26.724	0.0	61.668
152	22:20:20	32,17182	0	57,77578	22:20:20.0	29.919	0.0	61.659
153	22:20:21	29,4431	6,558918	57,7814	22:20:21.0	30.665	0.0	61.688
154	22:20:22	30,02779	0,483441	57,77786	22:20:22.0	31.922	0.0	61.684
155	22:20:23	32,29919	1,479713	57,77201	22:20:23.0	30.654	0.0	61.681
156	22:20:24	29,56781	7,154758	57,77483	22:20:24.0	29.647	0.0	61.672
157	22:20:25	31,3237	5,090837	57,77748	22:20:25.0	29.15	0.0	61.674
158	22:20:26	30,36154	8,708161	57,74403	22:20:26.0	31.369	0.0	61.668
159	22:20:27	33,60233	87,21578	57,70878	22:20:27.0	30.331	0.0	61.683
160	22:20:28	27,68887	44,15559	57,69696	22:20:28.0	33.085	0.0	61.67
161	22:20:29	27,10422	15,63522	57,6797	22:20:29.0	30.225	0.0	61.647
162	22:20:30	32,75652	4,899957	57,65115	22:20:30.0	28.197	0.0	61.628
163	22:20:31	30,61247	21,50091	57,61637	22:20:31.0	30.626	0.0	61.613
164	22:20:32	28,46847	11,27823	57,58105	22:20:32.0	30.552	0.0	61.594
165	22:20:33	31,90907	31,42192	57,54332	22:20:33.0	29.111	0.0	61.549
166	22:20:34	35,48521	13,59708	57,50481	22:20:34.0	30.838	0.0	61.522
167	22:20:35	30,41775	6,419066	57,48238	22:20:35.0	35.133	0.0	61.466
168	22:20:36	27,22645	91,39498	57,47495	22:20:36.0	31.073	0.0	61.444
169	22:20:37	31,3237	12,3015	57,46614	22:20:37.0	28.15	0.0	61.43
170	22:20:38	27,29904	7,234006	57,46954	22:20:38.0	30.875	0.0	61.418
171	22:20:39	30,00583	33,69024	57,4754	22:20:39.0	26.884	0.0	61.404
172	22:20:40	27,61632	18,52081	57,47284	22:20:40.0	28.756	0.0	61.375
173	22:20:41	29,76276	15,64294	57,46868	22:20:41.0	28.175	0.0	61.345
174	22:20:42	28,20202	61,9353	57,481	22:20:42.0	29.743	1.0	61.345
175	22:20:43	19,50251	35,96899	57,49814	22:20:43.0	28.125	0.0	61.35
176	22:20:44	16,96231	8,669468	57,49133	22:20:44.0	20.692	0.0	61.343
177	22:20:45	17,47198	27,69027	57,48824	22:20:45.0	17.064	0.0	61.343
178	22:20:46	16,95909	56,38483	57,48621	22:20:46.0	16.65	0.0	61.344
179	22:20:47	18,25185	15,46398	57,48535	22:20:47.0	17.562	0.0	61.344
180	22:20:48	17,66684	43,03794	57,48478	22:20:48.0	19.311	0.0	61.344
181	22:20:49	15,99431	8,383334	57,49546	22:20:49.0	17.585	1.0	61.344
182	22:20:50	17,03455	15,32138	57,49181	22:20:50.0	16.053	0.0	61.343
183	22:20:51	19,22728	29,42725	57,49738	22:20:51.0	18.081	0.0	61.343
184	22:20:53	15,32518	61,34561	57,48805	22:20:53.0	15.993	1.0	61.343

185	22:20:54	14,79382	66,02161	57,4924	22:20:54.0	15.908	0.0	61.343
186	22:20:55	16,57913	39,74169	57,49092	22:20:55.0	15.593	0.0	61.344
187	22:20:56	18,25169	20,48911	57,50582	22:20:56.0	18.912	0.0	61.344
188	22:20:57	18,83714	26,73736	57,48707	22:20:57.0	17.356	2.0	61.341
189	22:20:58	17,08117	11,00089	57,48026	22:20:58.0	18.348	0.0	61.341
190	22:20:59	21,56866	44,69071	57,51577	22:20:59.0	20.166	2.0	61.349
191	22:21:00	16,18959	42,89284	57,50634	22:21:00.0	17.673	0.0	61.381
192	22:21:01	16,10559	10,60516	57,50051	22:21:01.0	17.207	0.0	61.377
193	22:21:02	16,38413	32,43917	57,50223	22:21:02.0	18.108	0.0	61.375
194	22:21:03	16,49619	100,7384	57,49642	22:21:03.0	15.208	1.0	61.375
195	22:21:04	17,66649	51,59655	57,49293	22:21:04.0	16.35	1.0	61.375
196	22:21:05	16,96884	23,21554	57,49085	22:21:05.0	18.575	0.0	61.374
197	22:21:06	18,25589	7,881286	57,4941	22:21:06.0	18.742	0.0	61.374
198	22:21:07	16,77398	82,14828	57,49362	22:21:07.0	16.002	1.0	61.374
199	22:21:08	16,88614	37,04333	57,50089	22:21:08.0	18.115	1.0	61.373
200	22:21:09	20,98323	19,22902	57,49563	22:21:09.0	19.685	0.0	61.373
201	22:21:10	14,9352	11,65317	57,49173	22:21:10.0	16.392	0.0	61.373
202	22:21:11	17,08118	74,61812	57,49472	22:21:11.0	16.293	0.0	61.373
203	22:21:12	16,69107	59,68328	57,49374	22:21:12.0	17.124	1.0	61.373
204	22:21:13	17,37066	20,45392	57,48958	22:21:13.0	15.994	0.0	61.372
205	22:21:14	17,47145	7,491155	57,4924	22:21:14.0	16.548	0.0	61.371
206	22:21:15	19,04498	65,88713	57,49374	22:21:15.0	20.522	3.0	61.37
207	22:21:16	18,64205	11,47013	57,48934	22:21:16.0	19.612	0.0	61.37
208	22:21:17	19,42241	14,88835	57,48516	22:21:17.0	18.942	0.0	61.371
209	22:21:18	23,40093	8,411003	57,48755	22:21:18.0	22.055	0.0	61.37
210	22:21:19	18,72306	59,67076	57,48456	22:21:19.0	19.234	0.0	61.372
211	22:21:20	16,38478	44,00478	57,52708	22:21:20.0	18.937	0.0	61.375
212	22:21:21	16,57901	8,465052	57,53086	22:21:21.0	16.194	0.0	61.376
213	22:21:22	15,99444	8,813609	57,5354	22:21:22.0	16.566	0.0	61.379
214	22:21:23	16,77418	15,13095	57,53844	22:21:23.0	16.756	0.0	61.382
215	22:21:24	15,76286	19,82696	57,53581	22:21:24.0	15.065	0.0	61.385
216	22:21:25	18,44686	21,98514	57,54791	22:21:25.0	16.766	0.0	61.384
217	22:21:26	16,57921	21,82471	57,54635	22:21:26.0	19.855	0.0	61.392
218	22:21:27	17,34599	56,11161	57,54903	22:21:27.0	16.546	0.0	61.395
219	22:21:28	15,0192	62,1179	57,55372	22:21:28.0	16.327	0.0	61.4
220	22:21:29	17,47125	11,53992	57,56125	22:21:29.0	15.635	0.0	61.409
221	22:21:30	17,47123	10,36064	57,56529	22:21:30.0	16.571	0.0	61.41
222	22:21:31	17,3588	13,38678	57,56113	22:21:31.0	17.383	0.0	61.418
223	22:21:32	17,27617	42,93467	57,57318	22:21:32.0	18.008	0.0	61.435
224	22:21:33	15,7997	10,12686	57,57938	22:21:33.0	18.116	0.0	61.455
225	22:21:34	15,01169	7,58624	57,57641	22:21:34.0	15.759	0.0	61.463
226	22:21:35	15,60456	58,59569	57,57641	22:21:35.0	15.805	2.0	61.475
227	22:21:36	16,69093	72,11636	57,59516	22:21:36.0	17.144	2.0	61.49
228	22:21:37	15,99481	136,2574	57,58928	22:21:37.0	15.625	2.0	61.507
229	22:21:38	15,71556	113,1465	57,59586	22:21:38.0	16.422	1.0	61.516

230	22:21:39	14,82599	113,6758	57,59263	22:21:39.0	15.196	1.0	61.516
231	22:21:40	17,35868	24,93601	57,59107	22:21:40.0	16.004	0.0	61.516
232	22:21:41	18,64203	13,97927	57,59227	22:21:41.0	16.575	0.0	61.515
233	22:21:42	17,05878	16,39136	57,59842	22:21:42.0	18.375	0.0	61.525
234	22:21:43	25,24766	8,58962	57,98113	22:21:43.0	16.979	1.0	61.527
235	22:21:44	34,44532	0	57,98298	22:21:44.0	26.171	0.0	62.084
236	22:21:45	34,05509	7,252553	57,98556	22:21:45.0	35.597	0.0	62.08
237	22:21:46	34,31881	5,641865	58,10931	22:21:46.0	34.823	0.0	62.139
238	22:21:47	33,66478	0	58,20655	22:21:47.0	33.448	0.0	62.345
239	22:21:48	35,6801	4,556473	58,19445	22:21:48.0	33.552	1.0	62.524
240	22:21:49	32,6894	3,156793	58,20717	22:21:49.0	37.435	0.0	62.546
241	22:21:50	33,73117	2,377208	58,19877	22:21:50.0	32.616	0.0	62.56
242	22:21:51	38,9936	6,217208	58,19236	22:21:51.0	33.522	0.0	62.552
243	22:21:52	33,86015	3,427866	58,20243	22:21:52.0	38.545	0.0	62.602
244	22:21:53	33,14642	31,64037	58,20274	22:21:53.0	31.841	0.0	62.585
245	22:21:54	33,53631	5,258097	58,19033	22:21:54.0	34.227	0.0	62.577
246	22:21:55	37,48088	7,603364	58,20031	22:21:55.0	35.318	0.0	62.584
247	22:21:56	36,45994	4,055345	58,19598	22:21:56.0	35.635	0.0	62.58
248	22:21:58	34,51065	0	58,20729	22:21:58.0	34.806	0.0	62.58
249	22:21:59	38,52062	0,472921	58,19351	22:21:59.0	34.126	0.0	62.561
250	22:22:00	32,29911	1,673547	58,17603	22:22:00.0	33.569	0.0	62.568
251	22:22:01	32,17318	0,544344	58,18285	22:22:01.0	32.839	0.0	62.573
252	22:22:02	36,20128	0,358036	58,17756	22:22:02.0	36.887	0.0	62.559
253	22:22:03	37,17685	0,300188	58,18263	22:22:03.0	37.549	0.0	62.577
254	22:22:04	36,26495	0	58,17517	22:22:04.0	36.604	0.0	62.562
255	22:22:05	42,6398	8,657292	58,19239	22:22:05.0	37.895	0.0	62.583
256	22:22:06	32,75655	3,707436	58,20088	22:22:06.0	35.315	0.0	62.562
257	22:22:07	38,20377	0,08399	58,18342	22:22:07.0	37.729	0.0	62.546
258	22:22:08	38,6038	2,966372	58,19134	22:22:08.0	37.811	0.0	62.555
259	22:22:09	37,04458	0,398852	58,18732	22:22:09.0	39.279	0.0	62.574
260	22:22:10	37,17664	3,918514	58,18935	22:22:10.0	36.717	0.0	62.557
261	22:22:11	35,91642	3,807618	58,18101	22:22:11.0	35.663	0.0	62.576
262	22:22:12	38,34747	1,521256	58,18447	22:22:12.0	36.743	0.0	62.56
263	22:22:13	34,25023	0	58,18729	22:22:13.0	34.761	0.0	62.549
264	22:22:14	33,27471	2,700663	58,18897	22:22:14.0	33.828	0.0	62.569
265	22:22:15	33,34695	11,24756	58,19892	22:22:15.0	35.214	0.0	62.552
266	22:22:16	32,10422	0,590276	58,19265	22:22:16.0	33.395	0.0	62.582
267	22:22:17	33,2747	0	58,17936	22:22:17.0	33.783	0.0	62.568
268	22:22:18	40,74794	6,49966	58,17862	22:22:18.0	33.971	1.0	62.558
269	22:22:19	39,9081	2,828361	58,1832	22:22:19.0	36.637	0.0	62.574
270	22:22:20	51,32064	2,242318	58,18703	22:22:20.0	41.518	0.0	62.588
271	22:22:21	44,78581	5,214155	58,19289	22:22:21.0	55.971	0.0	61.83
272	22:22:22	36,07009	0	58,20762	22:22:22.0	43.16	0.0	61.794
273	22:22:23	36,65469	6,479234	58,19432	22:22:23.0	35.677	0.0	61.78
274	22:22:24	38,93282	0,304513	58,19932	22:22:24.0	35.57	0.0	61.787

275	22:22:25	36,65481	0,067068	58,2071	22:22:25.0	36.616	0.0	61.775
276	22:22:26	36,65487	0	58,2186	22:22:26.0	36.294	0.0	61.76
277	22:22:27	38,59291	0	58,21628	22:22:27.0	36.319	0.0	61.782
278	22:22:28	30,61252	50,19193	58,18335	22:22:28.0	39.066	0.0	61.77
279	22:22:29	32,75647	6,999384	58,23087	22:22:29.0	30.782	0.0	61.755
280	22:22:30	34,64056	1,207982	58,21623	22:22:30.0	34.28	0.0	61.793
281	22:22:31	30,22276	8,328651	58,19643	22:22:31.0	33.49	0.0	61.783
282	22:22:32	31,19712	15,20639	58,14788	22:22:32.0	30.016	0.0	61.764
283	22:22:33	40,88384	67,51195	58,1284	22:22:33.0	31.539	0.0	61.773
284	22:22:34	33,34126	340,9775	58,08133	22:22:34.0	40.854	2.0	61.736
285	22:22:35	34,70563	5,222386	58,0628	22:22:35.0	34.17	0.0	61.733
286	22:22:36	35,53888	7,244912	58,02358	22:22:36.0	34.806	0.0	61.708
287	22:22:37	31,51883	7,538896	58,011	22:22:37.0	32.504	1.0	61.692
288	22:22:38	33,07962	4,815033	57,98166	22:22:38.0	30.699	0.0	61.673
289	22:22:39	35,22566	21,90308	57,95507	22:22:39.0	36.247	0.0	61.623
290	22:22:40	30,02782	69,0041	57,92371	22:22:40.0	34.468	0.0	61.592
291	22:22:42	31,51875	37,36497	57,92056	22:22:42.0	30.748	0.0	61.551
292	22:22:43	28,85837	6,095593	57,92027	22:22:43.0	28.933	0.0	61.535
293	22:22:44	30,4176	6,929641	57,91632	22:22:44.0	29.45	0.0	61.519
294	22:22:45	30,15311	9,444382	57,91238	22:22:45.0	30.566	0.0	61.505
295	22:22:46	28,66417	5,722524	57,91109	22:22:46.0	29.54	0.0	61.486
296	22:22:47	29,05334	86,31706	57,92594	22:22:47.0	28.021	1.0	61.468
297	22:22:48	25,73993	27,07116	57,91008	22:22:48.0	27.082	0.0	61.453
298	22:22:49	15,99434	7,28915	57,91286	22:22:49.0	18.396	0.0	61.453
299	22:22:50	15,99428	8,362772	57,9131	22:22:50.0	14.664	0.0	61.453
300	22:22:51	18,13824	56,94326	57,90965	22:22:51.0	17.964	0.0	61.453
301	22:22:52	18,06816	10,9187	57,9037	22:22:52.0	17.399	0.0	61.452
302	22:22:53	17,3588	10,98596	57,90138	22:22:53.0	17.668	0.0	61.452
303	22:22:54	21,04569	28,47545	57,90602	22:22:54.0	18.829	0.0	61.451
304	22:22:55	19,89255	73,42808	57,98522	22:22:55.0	18.762	1.0	61.451
305	22:22:56	15,60457	32,97964	57,98632	22:22:56.0	18.437	0.0	61.457
306	22:22:57	17,10382	8,338592	57,98446	22:22:57.0	17.62	0.0	61.461
307	22:22:58	17,35883	30,65431	57,99065	22:22:58.0	17.466	0.0	61.465
308	22:22:59	23,51134	128,2881	58,02502	22:22:59.0	17.509	1.0	61.487
309	22:23:00	18,05656	283,7812	58,04192	22:23:00.0	22.945	1.0	61.613
310	22:23:01	19,61745	141,2653	58,03618	22:23:01.0	20.256	1.0	61.62
311	22:23:02	24,3755	150,2954	58,07547	22:23:02.0	21.087	1.0	61.657
312	22:23:03	22,54397	160,1436	58,07289	22:23:03.0	23.879	1.0	61.691
313	22:23:04	21,82433	222,0483	58,04785	22:23:04.0	23.571	3.0	61.691
314	22:23:05	20,86719	125,6933	58,0491	22:23:05.0	19.897	3.0	61.685
315	22:23:06	28,78745	148,9803	58,05488	22:23:06.0	24.142	1.0	61.687
316	22:23:07	22,15382	236,3799	58,06493	22:23:07.0	25.652	5.0	61.697
317	22:23:08	32,95142	187,3897	58,06665	22:23:08.0	23.403	1.0	61.738
318	22:23:09	28,84759	402,9774	58,0655	22:23:09.0	36.061	5.0	61.768
319	22:23:10	22,0367	304,8687	58,07291	22:23:10.0	28.485	4.0	61.795

320	22:23:11	23,40086	236,1189	58,06426	22:23:11.0	24.953	1.0	61.804
321	22:23:12	24,96017	216,5585	58,06311	22:23:12.0	19.345	1.0	61.814
322	22:23:13	17,08111	285,4641	58,05928	22:23:13.0	24.237	2.0	61.814
323	22:23:14	14,93503	269,4424	58,06524	22:23:14.0	17.127	3.0	61.815
324	22:23:15	18,25198	300,8656	58,02882	22:23:15.0	15.021	4.0	61.822
325	22:23:16	17,35868	235,2502	58,02535	22:23:16.0	18.719	2.0	61.767
326	22:23:17	18,13876	130,032	58,02745	22:23:17.0	16.81	3.0	61.666
327	22:23:18	14,98691	148,5934	58,02076	22:23:18.0	18.6	1.0	61.665
328	22:23:19	18,52825	240,7072	58,02214	22:23:19.0	16.062	3.0	61.665
329	22:23:20	16,18918	8,803845	58,03176	22:23:20.0	18.131	0.0	61.647
330	22:23:21	16,38425	82,09805	58,02717	22:23:21.0	16.77	2.0	61.647
331	22:23:22	18,7298	125,9424	58,02796	22:23:22.0	16.925	2.0	61.646
332	22:23:23	17,49977	81,38702	58,03126	22:23:23.0	17.839	3.0	61.645
333	22:23:24	18,25166	10,74486	58,03647	22:23:24.0	17.739	0.0	61.645
334	22:23:25	21,40437	27,77203	58,04809	22:23:25.0	18.14	0.0	61.644
335	22:23:26	21,84172	181,4316	58,05414	22:23:26.0	21.401	0.0	61.648
336	22:23:27	16,77404	110,2762	58,05766	22:23:27.0	20.183	2.0	61.65
337	22:23:29	18,64196	15,83594	58,02655	22:23:29.0	27.213	0.0	61.67
338	22:23:30	23,71471	9,795484	58,03274	22:23:30.0	22.636	0.0	61.669
339	22:23:31	20,2028	9,054606	58,03977	22:23:31.0	22.555	0.0	61.669
340	22:23:32	18,64184	10,50985	58,04866	22:23:32.0	18.71	0.0	61.671
341	22:23:33	16,30078	22,37815	58,04876	22:23:33.0	17.92	1.0	61.673
342	22:23:34	17,74851	73,46233	58,05309	22:23:34.0	17.153	1.0	61.7
343	22:23:35	16,57907	10,35987	58,06466	22:23:35.0	16.789	0.0	61.74
344	22:23:36	18,12119	13,39102	58,07035	22:23:36.0	17.924	0.0	61.763
345	22:23:37	17,74869	46,07661	58,07841	22:23:37.0	17.167	0.0	61.8
346	22:23:38	19,03207	6,739329	58,08987	22:23:38.0	18.374	0.0	61.826
347	22:23:39	20,28237	51,32314	58,10493	22:23:39.0	21.038	1.0	61.844
348	22:23:40	17,55371	23,9668	58,11209	22:23:40.0	18.531	0.0	61.853
349	22:23:41	20,67228	86,88905	58,12811	22:23:41.0	19.732	1.0	61.902
350	22:23:42	17,16419	63,70674	58,13961	22:23:42.0	17.554	0.0	61.901
351	22:23:43	23,01119	88,94235	58,43758	22:23:43.0	17.575	1.0	61.907
352	22:23:44	29,05322	40,05578	58,61361	22:23:44.0	24.753	0.0	62.562
353	22:23:45	35,84203	2,399557	58,77962	22:23:45.0	35.458	0.0	62.815
354	22:23:46	31,00233	3,205868	58,73686	22:23:46.0	37.954	0.0	62.935
355	22:23:47	33,21305	2,459548	58,73724	22:23:47.0	32.959	0.0	62.974
356	22:23:48	38,7375	8,637008	58,74392	22:23:48.0	29.903	0.0	62.958
357	22:23:49	36,84945	3,602753	58,75592	22:23:49.0	38.341	0.0	62.937
358	22:23:50	32,75681	4,399457	58,75743	22:23:50.0	36.485	0.0	62.963
359	22:23:51	38,21404	2,697697	58,76142	22:23:51.0	34.882	0.0	62.94
360	22:23:52	32,75638	5,833189	58,75937	22:23:52.0	37.555	0.0	62.959
361	22:23:53	35,09566	3,551534	58,76283	22:23:53.0	32.75	0.0	62.991
362	22:23:54	38,79885	3,839993	58,76984	22:23:54.0	35.572	0.0	62.977
363	22:23:55	34,90094	0	58,78615	22:23:55.0	38.816	0.0	62.993
364	22:23:56	35,81117	7,300244	58,78115	22:23:56.0	34.883	0.0	63.016



365	22:23:57	36,07002	0,864246	58,78	22:23:57.0	35.236	0.0	63.008
366	22:23:58	34,51062	38,15464	58,78156	22:23:58.0	35.259	0.0	63.031
367	22:23:59	30,73842	0,135654	58,78624	22:23:59.0	34.194	1.0	63.023
368	22:24:00	34,06545	5,697374	58,77756	22:24:00.0	32.815	0.0	63.013
369	22:24:01	30,22267	3,534418	58,76922	22:24:01.0	33.003	0.0	63.032
370	22:24:02	32,95153	4,393739	58,76785	22:24:02.0	32.752	0.0	63.015
371	22:24:04	34,44525	2,389837	58,77369	22:24:04.0	34.174	0.0	63.036
372	22:24:05	33,53605	0	58,77455	22:24:05.0	32.93	0.0	63.02
373	22:24:06	37,43428	0	58,78564	22:24:06.0	34.951	0.0	63.013
374	22:24:07	31,90907	3,90172	58,77752	22:24:07.0	36.715	0.0	63.028
375	22:24:08	32,9514	2,161013	58,7817	22:24:08.0	31.812	0.0	63.029
376	22:24:09	39,10239	0,283128	58,78541	22:24:09.0	38.488	0.0	63.055
377	22:24:10	35,8749	5,701327	58,76915	22:24:10.0	35.866	0.0	63.039
378	22:24:11	32,36665	0,498607	58,77414	22:24:11.0	30.169	0.0	63.036
379	22:24:12	37,0443	0	58,77316	22:24:12.0	32.399	0.0	63.04
380	22:24:13	38,15219	12,16447	58,77823	22:24:13.0	39.541	0.0	63.028
381	22:24:14	45,10323	0,068323	58,74286	22:24:14.0	45.23	0.0	63.046
382	22:24:15	34,38123	1,254292	58,73447	22:24:15.0	41.723	0.0	62.99
383	22:24:16	34,59277	0	58,73375	22:24:16.0	35.795	0.0	62.984
384	22:24:17	31,78204	8,043668	58,72868	22:24:17.0	32.535	1.0	62.992

**Elaborado por:** Jayron Silva, Anjelo Minango

## MÉTODO ACTUALIZAR

**Tabla 31.** Datos DAPPER Actualizar

<b>DAPPER</b>								
Actualizar								
N°	Código				Jmeter			
	Tiempo	CPU	Disco	Memoria	Tiempo	CPU	Disco	Memoria
1	22:35:23	22,02839	2,325625	58,03221	22:35:23.0	4.598	0.0	61.029
2	22:35:24	18,44689	1,679228	58,02791	22:35:24.0	22.678	0.0	61.688
3	22:35:25	22,97848	2,677435	58,0418	22:35:25.0	22.709	0.0	61.719
4	22:35:26	23,33573	3,582539	58,048	22:35:26.0	19.288	0.0	61.904
5	22:35:27	23,59557	3,917662	58,06794	22:35:27.0	25.308	0.0	61.985
6	22:35:28	23,20602	1,481099	58,06155	22:35:28.0	22.321	0.0	62.042
7	22:35:29	20,74997	49,46836	58,05658	22:35:29.0	20.993	0.0	62.119
8	22:35:30	19,61732	4,018957	58,04618	22:35:30.0	23.422	0.0	62.172
9	22:35:32	22,42629	0,079964	58,05503	22:35:32.0	19.339	0.0	62.545
10	22:35:33	21,56579	0,372703	58,04852	22:35:33.0	22.223	0.0	62.541
11	22:35:34	19,22732	0,293345	58,04666	22:35:34.0	20.868	0.0	62.567
12	22:35:35	17,27615	2,580645	58,04816	22:35:35.0	20.724	0.0	62.577
13	22:35:36	24,57023	0,963077	58,04563	22:35:36.0	17.837	0.0	62.645
14	22:35:37	24,78045	0,1848	58,03819	22:35:37.0	22.559	0.0	62.716
15	22:35:38	23,72251	3,8781	58,05634	22:35:38.0	24.759	0.0	62.713

16	22:35:39	28,07872	4,222437	58,03754	22:35:39.0	24.403	0.0	62.735
17	22:35:40	28,24816	2,26057	58,05696	22:35:40.0	27.244	0.0	62.762
18	22:35:41	20,28233	0	58,05558	22:35:41.0	28.016	0.0	62.838
19	22:35:42	21,61227	0,961431	58,05182	22:35:42.0	20.1	1.0	62.853
20	22:35:43	19,81262	0,068636	58,05266	22:35:43.0	21.052	0.0	62.849
21	22:35:44	19,22724	0,10258	58,05307	22:35:44.0	20.142	0.0	62.85
22	22:35:45	19,61752	2,123331	58,06017	22:35:45.0	19.698	0.0	62.855
23	22:35:46	21,82641	3,639988	58,06839	22:35:46.0	19.538	0.0	62.846
24	22:35:47	21,95872	2,512055	58,06263	22:35:47.0	21.158	0.0	62.852
25	22:35:48	22,62125	0,338868	58,07201	22:35:48.0	22.592	0.0	62.857
26	22:35:49	19,08365	0	58,06579	22:35:49.0	21.967	0.0	62.857
27	22:35:50	23,12929	0,528823	58,06588	22:35:50.0	19.632	0.0	62.871
28	22:35:51	17,66658	1,523773	58,06617	22:35:51.0	20.663	0.0	62.87
29	22:35:52	19,61749	1,625566	58,06081	22:35:52.0	19.488	0.0	62.865
30	22:35:53	19,89252	0,17674	58,05536	22:35:53.0	19.478	0.0	62.87
31	22:35:54	21,84163	0	58,07048	22:35:54.0	20.517	0.0	62.866
32	22:35:55	18,91781	0,336743	58,06667	22:35:55.0	20.249	0.0	62.871
33	22:35:56	21,95862	1,662698	58,06466	22:35:56.0	20.127	0.0	62.872
34	22:35:57	19,61757	3,023443	58,05766	22:35:57.0	22.013	0.0	62.876
35	22:35:58	21,64676	4,504057	58,05878	22:35:58.0	18.937	0.0	62.874
36	22:35:59	18,13821	0,244728	58,07117	22:35:59.0	20.137	0.0	62.871
37	22:36:00	19,10469	0,729363	58,07038	22:36:00.0	21.214	0.0	62.907
38	22:36:01	20,28228	7,242043	58,03695	22:36:01.0	19.688	0.0	62.897
39	22:36:02	21,06228	66,70621	58,00588	22:36:02.0	20.426	0.0	62.892
40	22:36:03	18,52829	8,422697	57,96853	22:36:03.0	18.275	0.0	62.854
41	22:36:04	20,67249	25,69674	57,94191	22:36:04.0	20.317	0.0	62.847
42	22:36:05	19,03361	33,87988	57,8999	22:36:05.0	19.147	1.0	62.841
43	22:36:06	19,03222	7,136002	57,87642	22:36:06.0	18.638	0.0	62.787
44	22:36:07	20,39793	69,00319	57,85068	22:36:07.0	19.458	0.0	62.775
45	22:36:08	19,117	7,317728	57,84126	22:36:08.0	19.132	1.0	62.768
46	22:36:09	19,26593	7,207244	57,80606	22:36:09.0	19.977	0.0	62.702
47	22:36:10	19,61754	31,50951	57,77129	22:36:10.0	20.365	0.0	62.691
48	22:36:11	14,93504	30,47573	57,75993	22:36:11.0	17.969	0.0	62.624
49	22:36:12	18,64213	41,04329	57,76622	22:36:12.0	17.297	0.0	62.616
50	22:36:13	17,65439	46,55735	57,76036	22:36:13.0	16.408	1.0	62.606
51	22:36:14	15,52031	7,620725	57,76117	22:36:14.0	15.655	0.0	62.603
52	22:36:15	17,32327	27,97673	57,75168	22:36:15.0	17.601	0.0	62.597
53	22:36:16	17,14841	42,76046	57,7555	22:36:16.0	17.458	1.0	62.586
54	22:36:17	15,52048	13,52224	57,74943	22:36:17.0	15.23	0.0	62.58
55	22:36:18	19,61748	55,16295	57,75103	22:36:18.0	18.056	0.0	62.552
56	22:36:19	15,37884	130,6252	57,74594	22:36:19.0	15.275	0.0	62.532
57	22:36:20	17,75497	73,64266	57,74271	22:36:20.0	17.698	2.0	62.528
58	22:36:21	16,88606	8,10673	57,74766	22:36:21.0	18.05	0.0	62.503
59	22:36:22	15,71548	7,088331	57,74228	22:36:22.0	16.76	0.0	62.496
60	22:36:23	15,9943	7,219821	57,73884	22:36:23.0	16.233	0.0	62.495

61	22:36:24	18,07412	7,290523	57,74054	22:36:24.0	17.316	0.0	62.493
62	22:36:25	14,82502	7,381776	57,74395	22:36:25.0	16.189	0.0	62.49
63	22:36:26	18,28395	20,27681	57,74572	22:36:26.0	16.422	0.0	62.489
64	22:36:27	18,52016	30,63312	57,75349	22:36:27.0	15.698	0.0	62.488
65	22:36:28	17,12405	53,03553	57,75579	22:36:28.0	17.849	0.0	62.488
66	22:36:29	17,86156	13,3698	57,75586	22:36:29.0	17.806	0.0	62.486
67	22:36:30	17,91695	8,221925	57,76545	22:36:30.0	16.892	1.0	62.487
68	22:36:31	16,96871	45,97532	57,74761	22:36:31.0	18.341	0.0	62.487
69	22:36:33	16,88613	26,52912	57,75386	22:36:33.0	16.367	0.0	62.487
70	22:36:34	17,74849	7,575549	57,75275	22:36:34.0	16.237	0.0	62.487
71	22:36:35	18,05666	28,29363	57,75032	22:36:35.0	18.374	0.0	62.487
72	22:36:36	19,61752	37,81323	57,75684	22:36:36.0	17.25	1.0	62.486
73	22:36:37	14,82483	51,01102	57,755	22:36:37.0	19.816	0.0	62.485
74	22:36:38	16,69228	8,21846	57,76012	22:36:38.0	15.148	0.0	62.484
75	22:36:39	18,33312	29,99593	57,75598	22:36:39.0	16.61	1.0	62.484
76	22:36:40	15,91032	16,45372	57,75283	22:36:40.0	17.739	0.0	62.489
77	22:36:41	16,88606	22,5976	57,75146	22:36:41.0	16.064	1.0	62.488
78	22:36:42	19,81246	65,36555	57,75137	22:36:42.0	16.9	1.0	62.487
79	22:36:43	22,4262	34,89568	57,74678	22:36:43.0	21.749	0.0	62.483
80	22:36:44	21,64676	62,09238	57,75484	22:36:44.0	21.29	0.0	62.482
81	22:36:45	15,55208	40,12497	57,75075	22:36:45.0	21.483	0.0	62.482
82	22:36:46	19,42251	7,699947	57,75294	22:36:46.0	16.141	0.0	62.482
83	22:36:47	22,81095	11,83716	57,74661	22:36:47.0	19.167	0.0	62.481
84	22:36:48	15,13011	22,35224	57,74431	22:36:48.0	22.735	0.0	62.481
85	22:36:49	17,66655	20,81218	57,75345	22:36:49.0	15.572	1.0	62.48
86	22:36:50	16,69119	7,427529	57,75907	22:36:50.0	17.805	0.0	62.48
87	22:36:51	16,10572	58,07155	57,74532	22:36:51.0	16.305	0.0	62.481
88	22:36:52	17,66635	11,61457	57,74381	22:36:52.0	16.41	0.0	62.48
89	22:36:53	16,69101	79,16742	57,74128	22:36:53.0	17.677	1.0	62.48
90	22:36:54	17,3587	7,999852	57,73035	22:36:54.0	15.998	1.0	62.479
91	22:36:55	17,0812	26,03469	57,74032	22:36:55.0	18.667	0.0	62.479
92	22:36:56	16,37634	18,05957	57,73599	22:36:56.0	17.123	0.0	62.478
93	22:36:57	20,28235	14,88247	57,74159	22:36:57.0	16.437	0.0	62.477
94	22:36:58	18,52812	10,98857	57,75228	22:36:58.0	20.505	0.0	62.477
95	22:36:59	20,00765	91,8644	57,74273	22:36:59.0	16.934	0.0	62.477
96	22:37:00	15,71561	49,74017	57,73128	22:37:00.0	21.7	2.0	62.473
97	22:37:01	17,56372	99,0628	57,7308	22:37:01.0	15.267	1.0	62.47
98	22:37:02	15,91055	67,56821	57,72533	22:37:02.0	18.645	0.0	62.466
99	22:37:03	17,17483	15,38569	57,72375	22:37:03.0	15.106	0.0	62.464
100	22:37:04	14,82486	14,88801	57,72215	22:37:04.0	16.844	0.0	62.463
101	22:37:05	16,49728	13,10071	57,72188	22:37:05.0	16.381	0.0	62.463
102	22:37:06	14,54484	8,719543	57,72188	22:37:06.0	15.991	0.0	62.462
103	22:37:07	15,0019	17,94758	57,72255	22:37:07.0	14.462	0.0	62.461
104	22:37:08	16,1057	31,55031	57,72953	22:37:08.0	14.918	0.0	62.461
105	22:37:09	17,86159	25,37723	57,72442	22:37:09.0	15.585	1.0	62.461

106	22:37:10	14,63004	109,8362	57,7231	22:37:10.0	17.342	0.0	62.46
107	22:37:11	16,18932	80,39938	57,72683	22:37:11.0	15.118	1.0	62.46
108	22:37:12	16,31147	39,31026	57,73281	22:37:12.0	17.246	1.0	62.459
109	22:37:13	16,45886	17,90121	57,72497	22:37:13.0	15.365	1.0	62.459
110	22:37:14	14,73984	9,460319	57,72757	22:37:14.0	15.085	0.0	62.459
111	22:37:15	15,92205	21,34596	57,72987	22:37:15.0	16.517	0.0	62.457
112	22:37:16	15,9943	11,71828	57,72645	22:37:16.0	15.455	0.0	62.457
113	22:37:17	14,63005	11,70795	57,72444	22:37:17.0	15.633	0.0	62.456
114	22:37:18	15,71545	74,34856	57,72506	22:37:18.0	14.776	1.0	62.457
115	22:37:19	15,71548	10,58933	57,74001	22:37:19.0	15.745	0.0	62.456
116	22:37:20	17,70094	37,59315	57,73171	22:37:20.0	15.171	0.0	62.456
117	22:37:21	35,03053	4,699556	57,98305	22:37:21.0	15.464	0.0	62.456
118	22:37:22	20,08764	37,17253	57,97085	22:37:22.0	24.299	0.0	62.456
119	22:37:23	22,34889	2,594308	57,96447	22:37:23.0	33.362	0.0	62.649
120	22:37:24	19,40425	1,329473	57,96535	22:37:24.0	18.707	0.0	62.693
121	22:37:25	19,02546	0,396028	57,97314	22:37:25.0	19.293	0.0	62.691
122	22:37:26	23,01109	8,662673	57,97384	22:37:26.0	22.18	0.0	62.673
123	22:37:27	20,96939	2,286248	57,96466	22:37:27.0	21.29	0.0	62.708
124	22:37:28	24,29999	0	57,96413	22:37:28.0	21.195	0.0	62.702
125	22:37:29	23,51942	5,035636	57,95882	22:37:29.0	19.377	0.0	62.688
126	22:37:30	22,23133	44,39509	57,96346	22:37:30.0	24.009	0.0	62.706
127	22:37:31	20,59297	7,199829	57,96251	22:37:31.0	22.189	3.0	62.699
128	22:37:32	18,41467	1,294766	57,93218	22:37:32.0	21.685	0.0	62.705
129	22:37:33	21,6466	2,856524	57,94261	22:37:33.0	23.147	0.0	62.695
130	22:37:34	22,15463	8,807291	57,93935	22:37:34.0	20.439	0.0	62.691
131	22:37:35	23,12323	5,692595	57,94526	22:37:35.0	21.843	0.0	62.684
132	22:37:36	19,92295	2,733206	57,9445	22:37:36.0	20.264	0.0	62.679
133	22:37:37	21,97024	5,042346	57,94591	22:37:37.0	21.264	0.0	62.671
134	22:37:38	23,98564	0,574031	57,9626	22:37:38.0	19.28	0.0	62.669
135	22:37:39	18,86784	1,942788	57,96332	22:37:39.0	24.403	0.0	62.666
136	22:37:40	21,17827	0,067608	57,94555	22:37:40.0	23.206	0.0	62.671
137	22:37:41	24,30008	2,832816	57,94715	22:37:41.0	20.477	0.0	62.664
138	22:37:42	26,12688	0,263157	57,95222	22:37:42.0	22.816	0.0	62.669
139	22:37:43	25,2755	0,66207	57,9594	22:37:43.0	24.026	0.0	62.658
140	22:37:44	25,66566	0	57,95485	22:37:44.0	25.003	0.0	62.645
141	22:37:45	25,338	3,991102	57,94545	22:37:45.0	25.97	0.0	62.646
142	22:37:46	26,05527	0,270133	57,95777	22:37:46.0	26.351	0.0	62.636
143	22:37:47	26,05728	0,496638	57,9471	22:37:47.0	24.634	0.0	62.635
144	22:37:48	27,81185	0	57,95079	22:37:48.0	26.984	0.0	62.654
145	22:37:49	33,27463	5,854097	57,95782	22:37:49.0	28.261	0.0	62.643
146	22:37:50	35,22569	1,131357	57,94534	22:37:50.0	31.714	0.0	62.677
147	22:37:51	32,17214	4,853033	57,93948	22:37:51.0	26.669	0.0	62.659
148	22:37:52	33,07957	0	57,9428	22:37:52.0	34.337	0.0	62.65
149	22:37:54	27,10403	0,440368	57,95796	22:37:54.0	32.771	0.0	62.646
150	22:37:55	22,50376	0	57,94875	22:37:55.0	28.039	0.0	62.648

151	22:37:56	28,39706	8,618722	57,94466	22:37:56.0	24.423	0.0	62.649
152	22:37:57	34,31584	20,54991	57,95894	22:37:57.0	25.871	0.0	62.633
153	22:37:58	37,04443	0,480645	57,95889	22:37:58.0	34.375	0.0	62.626
154	22:37:59	35,48511	0,394673	57,95488	22:37:59.0	37.027	0.0	62.656
155	22:38:00	33,34124	0,121369	57,94629	22:38:00.0	34.882	0.0	62.668
156	22:38:01	31,58709	0	57,95392	22:38:01.0	32.879	0.0	62.669
157	22:38:02	30,02775	12,78601	57,95626	22:38:02.0	31.977	0.0	62.651
158	22:38:03	32,95148	17,51647	57,90858	22:38:03.0	31.517	0.0	62.638
159	22:38:04	31,3921	28,82087	57,88462	22:38:04.0	32.745	0.0	62.646
160	22:38:05	30,15289	8,532007	57,85506	22:38:05.0	29.591	0.0	62.624
161	22:38:06	30,22273	9,805003	57,82689	22:38:06.0	30.685	0.0	62.606
162	22:38:07	28,46841	32,96683	57,79303	22:38:07.0	29.842	1.0	62.571
163	22:38:08	30,3483	8,489237	57,76012	22:38:08.0	27.76	1.0	62.551
164	22:38:09	27,29901	5,327985	57,73757	22:38:09.0	30.955	1.0	62.514
165	22:38:10	36,78639	67,53989	57,73422	22:38:10.0	26.79	1.0	62.494
166	22:38:11	31,32386	25,82249	57,70091	22:38:11.0	36.432	4.0	62.106
167	22:38:12	35,29041	12,12007	57,66838	22:38:12.0	31.897	0.0	61.961
168	22:38:13	29,05322	11,14833	57,67092	22:38:13.0	34.834	0.0	61.948
169	22:38:14	29,44326	60,28689	57,6703	22:38:14.0	28.511	2.0	61.935
170	22:38:15	31,78182	37,78579	57,67611	22:38:15.0	29.876	2.0	61.92
171	22:38:16	25,86093	7,180054	57,66418	22:38:16.0	31.575	0.0	61.897
172	22:38:17	27,10416	129,8934	57,65868	22:38:17.0	25.745	0.0	61.884
173	22:38:18	30,61266	13,80484	57,66449	22:38:18.0	27.282	0.0	61.858
174	22:38:19	27,03131	9,997237	57,66193	22:38:19.0	30.405	0.0	61.86
175	22:38:20	15,32514	25,32949	57,65045	22:38:20.0	27.082	0.0	61.852
176	22:38:21	14,54473	10,64749	57,66198	22:38:21.0	16.202	0.0	61.873
177	22:38:22	15,52025	9,956976	57,65342	22:38:22.0	15.414	0.0	61.879
178	22:38:23	15,56556	20,94238	57,65172	22:38:23.0	15.431	0.0	61.878
179	22:38:24	16,31081	30,9093	57,65179	22:38:24.0	15.81	1.0	61.878
180	22:38:25	15,76363	25,08549	57,65392	22:38:25.0	16.01	0.0	61.878
181	22:38:26	15,99424	29,82949	57,65404	22:38:26.0	15.589	0.0	61.879
182	22:38:27	15,60219	78,4473	57,64397	22:38:27.0	16.747	0.0	61.881
183	22:38:28	15,55753	12,34434	57,65413	22:38:28.0	15.826	0.0	61.878
184	22:38:29	18,44683	49,21589	57,67664	22:38:29.0	15.814	0.0	61.879
185	22:38:31	13,61379	84,88341	57,67618	22:38:31.0	16.562	1.0	61.943
186	22:38:32	15,52028	40,42872	57,67207	22:38:32.0	14.241	0.0	61.941
187	22:38:33	15,13013	72,1278	57,67147	22:38:33.0	15.662	0.0	61.944
188	22:38:34	14,51881	30,00035	57,6748	22:38:34.0	15.558	0.0	61.946
189	22:38:35	15,71535	27,53572	57,67422	22:38:35.0	14.949	0.0	61.959
190	22:38:36	17,7127	12,38904	57,68023	22:38:36.0	16.976	0.0	61.958
191	22:38:37	15,30849	18,49146	57,67745	22:38:37.0	16.548	0.0	61.958
192	22:38:38	14,93494	6,879795	57,67862	22:38:38.0	14.858	0.0	61.959
193	22:38:39	15,52051	7,458521	57,6769	22:38:39.0	14.824	0.0	61.958
194	22:38:40	16,57891	33,6036	57,67283	22:38:40.0	15.594	0.0	61.96
195	22:38:41	14,42059	85,17838	57,67508	22:38:41.0	16.841	3.0	61.959

196	22:38:42	14,7399	16,88607	57,67697	22:38:42.0	15.426	1.0	61.958
197	22:38:43	16,57897	35,77297	57,6768	22:38:43.0	15.948	0.0	61.957
198	22:38:44	15,52032	68,49986	57,6748	22:38:44.0	15.399	0.0	61.965
199	22:38:45	15,32527	9,173882	57,67319	22:38:45.0	16.087	0.0	61.964
200	22:38:46	14,63167	12,9892	57,66736	22:38:46.0	14.977	0.0	61.962
201	22:38:47	14,5448	15,04264	57,67116	22:38:47.0	14.47	1.0	61.96
202	22:38:48	14,74001	20,85261	57,67556	22:38:48.0	14.026	0.0	61.962
203	22:38:49	16,10641	58,06963	57,68221	22:38:49.0	15.228	0.0	61.963
204	22:38:50	16,4166	26,51349	57,68202	22:38:50.0	15.286	1.0	61.962
205	22:38:51	15,52044	8,483676	57,68063	22:38:51.0	16.546	0.0	61.961
206	22:38:52	15,74707	15,12372	57,68407	22:38:52.0	17.527	0.0	61.964
207	22:38:53	15,40969	14,2053	57,68628	22:38:53.0	15.805	0.0	61.963
208	22:38:54	18,52834	24,837	57,68484	22:38:54.0	14.996	0.0	61.966
209	22:38:55	18,49464	7,273729	57,69051	22:38:55.0	14.598	0.0	61.966
210	22:38:56	16,88603	47,16409	57,68685	22:38:56.0	20.159	0.0	61.966
211	22:38:57	19,11281	59,2946	57,68353	22:38:57.0	18.8	1.0	61.966
212	22:38:58	21,98896	62,56828	57,68481	22:38:58.0	19.935	0.0	61.976
213	22:38:59	21,39025	18,47315	57,71332	22:38:59.0	21.337	1.0	61.984
214	22:39:00	15,55635	82,57021	57,69558	22:39:00.0	22.166	0.0	62.011
215	22:39:01	14,7399	99,2709	57,69443	22:39:01.0	14.246	1.0	62.01
216	22:39:02	15,58099	126,077	57,69852	22:39:02.0	15.196	1.0	62.009
217	22:39:03	18,49868	35,09564	57,69799	22:39:03.0	14.64	1.0	62.008
218	22:39:04	15,99447	7,721003	57,69295	22:39:04.0	16.191	0.0	62.009
219	22:39:05	15,40955	7,709126	57,69871	22:39:05.0	17.546	0.0	62.011
220	22:39:06	16,30066	7,347791	57,69419	22:39:06.0	15.571	0.0	62.01
221	22:39:07	22,3489	80,56315	57,70258	22:39:07.0	16.147	0.0	62.01
222	22:39:08	16,77387	27,65366	57,70206	22:39:08.0	20.262	0.0	62.011
223	22:39:09	16,30537	7,972664	57,69873	22:39:09.0	17.966	0.0	62.011
224	22:39:10	16,37541	7,630302	57,69141	22:39:10.0	16.227	0.0	62.011
225	22:39:11	17,74843	27,66663	57,70134	22:39:11.0	17.204	0.0	62.011
226	22:39:12	18,13847	6,976374	57,69414	22:39:12.0	15.326	0.0	62.011
227	22:39:13	15,52039	7,084764	57,69299	22:39:13.0	20.094	0.0	62.007
228	22:39:14	17,87384	25,63227	57,69742	22:39:14.0	16.699	0.0	62.007
229	22:39:15	15,32511	36,06642	57,6939	22:39:15.0	15.793	1.0	62.007
230	22:39:16	16,72518	79,70211	57,69292	22:39:16.0	16.566	0.0	62.007
231	22:39:17	15,60468	83,525	57,68905	22:39:17.0	17.415	0.0	62.008
232	22:39:18	14,8248	8,284036	57,68726	22:39:18.0	14.088	1.0	62.008
233	22:39:19	14,74008	7,617543	57,69354	22:39:19.0	15.776	0.0	62.007
234	22:39:20	15,52029	12,0591	57,69263	22:39:20.0	15.005	0.0	62.007
235	22:39:21	27,38088	4,802835	58,00887	22:39:21.0	14.312	0.0	62.007
236	22:39:22	23,11063	14,97595	57,99653	22:39:22.0	20.855	0.0	62.217
237	22:39:23	21,22547	1,47696	57,99778	22:39:23.0	27.827	0.0	62.349
238	22:39:24	19,04601	8,680288	57,99424	22:39:24.0	19.72	0.0	62.366
239	22:39:25	18,70582	0,292818	57,972	22:39:25.0	19.288	0.0	62.38
240	22:39:26	21,17818	3,243705	57,99909	22:39:26.0	19.7	0.0	62.424

241	22:39:27	20,07281	0,463668	57,99821	22:39:27.0	23.533	0.0	62.425
242	22:39:28	23,10185	0	57,98417	22:39:28.0	21.228	0.0	62.432
243	22:39:29	20,47731	3,573072	58,01368	22:39:29.0	20.129	0.0	62.431
244	22:39:30	21,41037	1,637413	58,0034	22:39:30.0	19.199	0.0	62.433
245	22:39:31	22,03654	40,1628	57,9968	22:39:31.0	20.971	0.0	62.43
246	22:39:32	23,32436	18,49855	58,00093	22:39:32.0	22.879	0.0	62.428
247	22:39:33	18,33273	0	58,00359	22:39:33.0	20.089	0.0	62.436
248	22:39:34	17,8304	0	57,99957	22:39:34.0	23.089	0.0	62.427
249	22:39:35	20,67209	1,010647	57,99687	22:39:35.0	19.114	0.0	62.427
250	22:39:36	20,00762	3,963262	58,00041	22:39:36.0	20.082	0.0	62.431
251	22:39:37	25,7273	0	58,00383	22:39:37.0	20.482	0.0	62.429
252	22:39:38	19,30775	4,58009	58,00832	22:39:38.0	17.81	0.0	62.429
253	22:39:40	24,10681	1,663762	58,00435	22:39:40.0	21.795	0.0	62.449
254	22:39:41	19,69777	0,167622	58,00433	22:39:41.0	21.391	0.0	62.438
255	22:39:42	17,66649	0,44685	58,01492	22:39:42.0	19.573	0.0	62.434
256	22:39:43	22,54393	2,11812	58,00378	22:39:43.0	20.047	0.0	62.448
257	22:39:44	20,64481	0,321533	58,01033	22:39:44.0	20.092	0.0	62.443
258	22:39:45	17,94349	1,227227	58,00655	22:39:45.0	19.676	0.0	62.442
259	22:39:46	22,03491	0,784388	57,99904	22:39:46.0	18.702	0.0	62.458
260	22:39:47	21,76369	0	58,01543	22:39:47.0	21.581	0.0	62.45
261	22:39:48	22,03654	3,655376	58,00971	22:39:48.0	22.42	0.0	62.447
262	22:39:49	20,67211	0,527468	58,00261	22:39:49.0	21.875	0.0	62.445
263	22:39:50	27,6169	0	58,00813	22:39:50.0	20.697	0.0	62.441
264	22:39:51	20,00778	1,118878	57,99555	22:39:51.0	28.432	0.0	62.449
265	22:39:52	22,34883	0,230753	57,99601	22:39:52.0	19.089	0.0	62.444
266	22:39:53	20,28224	11,88496	57,98972	22:39:53.0	22.607	0.0	62.44
267	22:39:54	22,35098	4,397586	57,99323	22:39:54.0	19.51	0.0	62.447
268	22:39:55	21,14058	0	57,99617	22:39:55.0	22.547	0.0	62.443
269	22:39:56	21,76369	0,506916	57,99553	22:39:56.0	20.809	0.0	62.441
270	22:39:57	20,37162	1,100203	58,00718	22:39:57.0	22.052	0.0	62.439
271	22:39:58	23,20591	0,196054	58,00163	22:39:58.0	20.218	0.0	62.435
272	22:39:59	19,46854	9,198656	57,95069	22:39:59.0	22.036	0.0	62.435
273	22:40:00	23,40091	0,314668	57,93976	22:40:00.0	21.472	0.0	62.403
274	22:40:01	25,50793	0	57,93579	22:40:01.0	23.053	0.0	62.383
275	22:40:02	24,31071	9,233781	57,91542	22:40:02.0	25.521	0.0	62.349
276	22:40:03	23,12928	39,4389	57,88462	22:40:03.0	24.552	0.0	62.344
277	22:40:04	22,20003	9,847114	57,85154	22:40:04.0	24.036	0.0	62.335
278	22:40:05	22,23155	11,29261	57,81393	22:40:05.0	19.895	0.0	62.286
279	22:40:06	28,07864	22,78806	57,80976	22:40:06.0	24.269	0.0	62.277
280	22:40:07	15,99415	7,55794	57,79147	22:40:07.0	25.209	0.0	62.269
281	22:40:08	20,20267	50,99217	57,75333	22:40:08.0	19.322	0.0	62.206
282	22:40:09	17,47138	7,427749	57,71915	22:40:09.0	20.329	1.0	62.196
283	22:40:10	20,86709	55,31768	57,68331	22:40:10.0	17.144	0.0	62.128
284	22:40:11	21,76377	73,29561	57,64201	22:40:11.0	20.855	1.0	62.118
285	22:40:12	19,5028	11,16301	57,63192	22:40:12.0	21.551	1.0	62.052

286	22:40:13	16,49563	9,082968	57,63053	22:40:13.0	18.796	0.0	62.04
287	22:40:14	18,68105	19,11308	57,63113	22:40:14.0	17.903	0.0	62.034
288	22:40:15	13,56918	9,886516	57,62161	22:40:15.0	15.394	0.0	62.029
289	22:40:16	17,86149	13,57699	57,63027	22:40:16.0	16.82	0.0	62.027
290	22:40:17	17,55384	7,654272	57,63407	22:40:17.0	17.544	0.0	62.021
291	22:40:18	16,49577	97,74696	57,62848	22:40:18.0	15.623	0.0	62.017
292	22:40:19	17,55355	70,52882	57,63031	22:40:19.0	17.49	1.0	62.0
293	22:40:20	18,25166	38,46474	57,63818	22:40:20.0	18.09	1.0	61.97
294	22:40:21	17,35853	33,73452	57,62613	22:40:21.0	17.587	0.0	61.96
295	22:40:22	18,52824	24,69672	57,62704	22:40:22.0	16.129	0.0	61.936
296	22:40:23	15,31763	8,095691	57,63051	22:40:23.0	18.707	1.0	61.929
297	22:40:24	18,52816	9,312038	57,63087	22:40:24.0	16.546	0.0	61.928
298	22:40:25	18,13828	15,68087	57,6137	22:40:25.0	18.123	0.0	61.928
299	22:40:26	18,48953	52,11649	57,62015	22:40:26.0	16.367	0.0	61.925
300	22:40:27	19,03226	21,88717	57,623	22:40:27.0	17.893	2.0	61.919
301	22:40:28	18,73095	13,42547	57,61913	22:40:28.0	22.302	0.0	61.917
302	22:40:29	15,13024	8,398427	57,61838	22:40:29.0	16.169	0.0	61.917
303	22:40:30	17,47132	7,804001	57,62147	22:40:30.0	18.24	0.0	61.917
304	22:40:31	14,62996	10,2963	57,63412	22:40:31.0	15.637	0.0	61.916
305	22:40:32	17,2763	20,48725	57,62305	22:40:32.0	15.886	0.0	61.916
306	22:40:33	17,86145	7,910103	57,62288	22:40:33.0	15.753	1.0	61.916
307	22:40:34	16,69114	91,83416	57,6196	22:40:34.0	16.185	0.0	61.915
308	22:40:35	17,86152	133,7152	57,61783	22:40:35.0	18.36	1.0	61.915
309	22:40:36	18,44966	9,865547	57,62321	22:40:36.0	18.321	2.0	61.915
310	22:40:37	16,69127	37,27678	57,61652	22:40:37.0	16.511	0.0	61.915
311	22:40:38	16,77405	11,90614	57,62245	22:40:38.0	20.686	0.0	61.915
312	22:40:39	17,47038	51,51244	57,62171	22:40:39.0	14.807	0.0	61.913
313	22:40:40	16,18131	23,77043	57,62766	22:40:40.0	18.167	0.0	61.913
314	22:40:41	15,71535	9,901226	57,6236	22:40:41.0	17.33	0.0	61.913
315	22:40:42	19,30792	64,82041	57,62422	22:40:42.0	15.444	0.0	61.912
316	22:40:43	19,03195	56,54035	57,6186	22:40:43.0	16.976	1.0	61.912
317	22:40:45	25,08064	55,03026	57,61671	22:40:45.0	16.814	0.0	61.911
318	22:40:46	16,90004	37,93119	57,62881	22:40:46.0	25.627	1.0	61.91
319	22:40:47	17,27627	14,06997	57,62278	22:40:47.0	17.134	0.0	61.91
320	22:40:48	16,10608	30,78902	57,6196	22:40:48.0	16.386	0.0	61.909
321	22:40:49	16,88588	15,26138	57,62843	22:40:49.0	16.006	0.0	61.909
322	22:40:50	21,17831	13,23861	57,62175	22:40:50.0	17.108	0.0	61.909
323	22:40:51	21,8249	8,33897	57,6158	22:40:51.0	21.069	0.0	61.906
324	22:40:52	17,16383	42,5149	57,61721	22:40:52.0	21.469	0.0	61.908
325	22:40:53	18,6418	65,46834	57,61673	22:40:53.0	16.922	0.0	61.908
326	22:40:54	16,96008	17,0339	57,63577	22:40:54.0	18.523	0.0	61.908
327	22:40:55	17,8894	16,18469	57,62025	22:40:55.0	16.618	0.0	61.908
328	22:40:56	16,66692	47,35505	57,62106	22:40:56.0	18.752	0.0	61.907
329	22:40:57	17,47121	14,0067	57,62317	22:40:57.0	16.551	0.0	61.904
330	22:40:58	22,81639	6,011824	57,60951	22:40:58.0	17.054	0.0	61.9



331	22:40:59	22,15386	44,54945	57,63632	22:40:59.0	23.138	0.0	61.9
332	22:41:00	18,05653	20,47409	57,61757	22:41:00.0	22.262	0.0	61.899
333	22:41:01	19,4225	54,30899	57,61341	22:41:01.0	18.116	0.0	61.896
334	22:41:02	19,50273	52,31902	57,61389	22:41:02.0	19.308	0.0	61.892
335	22:41:03	21,45173	16,4358	57,61714	22:41:03.0	19.023	0.0	61.888
336	22:41:04	17,55384	10,8248	57,62345	22:41:04.0	21.067	0.0	61.888
337	22:41:05	18,44686	11,74029	57,63025	22:41:05.0	20.087	0.0	61.888
338	22:41:06	18,31797	21,93186	57,62243	22:41:06.0	17.483	0.0	61.888
339	22:41:07	21,45191	48,0718	57,61745	22:41:07.0	17.918	1.0	61.888
340	22:41:08	19,82481	39,52098	57,60336	22:41:08.0	22.291	0.0	61.882
341	22:41:09	19,30773	15,53109	57,61855	22:41:09.0	16.794	0.0	61.862
342	22:41:10	15,18498	69,34317	57,62011	22:41:10.0	19.013	0.0	61.863
343	22:41:11	20,67218	30,01934	57,61219	22:41:11.0	18.907	1.0	61.863
344	22:41:12	20,49295	80,5724	57,61367	22:41:12.0	17.943	0.0	61.863
345	22:41:13	16,53187	20,37686	57,62204	22:41:13.0	22.514	1.0	61.859
346	22:41:14	16,77405	39,24377	57,61673	22:41:14.0	17.068	0.0	61.859
347	22:41:15	15,71582	8,960086	57,61515	22:41:15.0	15.871	0.0	61.859
348	22:41:16	14,93423	12,68403	57,61207	22:41:16.0	15.257	0.0	61.859
349	22:41:17	14,93508	22,95673	57,61666	22:41:17.0	15.556	0.0	61.859
350	22:41:18	15,7996	87,8074	57,61979	22:41:18.0	14.934	0.0	61.859
351	22:41:19	17,66173	84,64436	57,61953	22:41:19.0	14.752	2.0	61.86
352	22:41:20	16,4957	73,457	57,62269	22:41:20.0	16.255	2.0	61.86
353	22:41:21	21,04902	5,490997	57,93139	22:41:21.0	17.387	0.0	61.861
354	22:41:22	21,2182	4,998125	57,91774	22:41:22.0	15.168	0.0	61.862
355	22:41:23	23,32445	16,52446	57,90662	22:41:23.0	23.144	0.0	62.22
356	22:41:24	17,55368	9,108623	57,92044	22:41:24.0	22.052	0.0	62.259
357	22:41:25	19,631	3,054579	57,92881	22:41:25.0	21.57	0.0	62.261
358	22:41:26	20,0402	3,329314	57,94627	22:41:26.0	18.17	0.0	62.304
359	22:41:27	19,50253	8,166647	57,94335	22:41:27.0	22.504	0.0	62.293
360	22:41:28	20,59356	3,872338	57,93823	22:41:28.0	21.185	0.0	62.311
361	22:41:29	25,27551	8,313957	57,94529	22:41:29.0	14.617	0.0	62.31
362	22:41:30	21,64675	16,84143	57,93859	22:41:30.0	24.453	0.0	62.303
363	22:41:31	19,30779	6,375398	57,9143	22:41:31.0	23.073	0.0	62.298
364	22:41:32	17,74862	2,826313	57,94046	22:41:32.0	19.892	0.0	62.329
365	22:41:33	17,91252	1,953201	57,94146	22:41:33.0	18.752	0.0	62.324
366	22:41:34	20,17368	2,881391	57,94885	22:41:34.0	18.507	0.0	62.329
367	22:41:36	19,42234	1,489922	57,93213	22:41:36.0	17.523	0.0	62.322
368	22:41:37	22,73914	0,492482	57,94899	22:41:37.0	19.167	0.0	62.322
369	22:41:38	18,6421	0	57,93335	22:41:38.0	22.904	0.0	62.315
370	22:41:39	20,2028	2,938008	57,94187	22:41:39.0	18.672	0.0	62.319
371	22:41:40	22,93429	12,41895	57,94103	22:41:40.0	21.109	0.0	62.318
372	22:41:41	14,73991	0	57,93149	22:41:41.0	21.843	0.0	62.329
373	22:41:42	19,61754	0	57,94835	22:41:42.0	17.16	0.0	62.322
374	22:41:43	18,83719	0,25131	57,94445	22:41:43.0	18.679	0.0	62.317
375	22:41:44	20,47721	0,068007	57,94347	22:41:44.0	19.091	0.0	62.322

376	22:41:45	21,64766	5,056992	57,93484	22:41:45.0	20.88	0.0	62.323
377	22:41:46	20,47712	0,4688	57,9257	22:41:46.0	20.7	0.0	62.323
378	22:41:47	25,54496	0,444778	57,93414	22:41:47.0	21.277	0.0	62.321
379	22:41:48	24,10482	0,756089	57,94335	22:41:48.0	26.714	0.0	62.318
380	22:41:49	17,84619	0,204689	57,93398	22:41:49.0	23.48	0.0	62.319
381	22:41:50	21,95866	0	57,9372	22:41:50.0	18.924	0.0	62.319
382	22:41:51	22,03642	0,918535	57,92891	22:41:51.0	21.16	0.0	62.315
383	22:41:52	21,37338	2,719464	57,93087	22:41:52.0	21.752	0.0	62.321
384	22:41:53	22,73907	0,307281	57,92018	22:41:53.0	21.16	0.0	62.324

**Elaborado por:** Jayron Silva, Anjelo Minango

## MÉTODO ELIMINAR

**Tabla 32.** Datos DAPPER Eliminar

DAPPER								
Eliminar								
N°	Código				Jmeter			
	Tiempo	CPU	Disco	Memoria	Tiempo	CPU	Disco	Memoria
1	22:43:16	21,63516	9,737597	58,45095	22:43:16.0	22.281	0.0	63.116
2	22:43:17	21,84147	9,173647	58,35044	22:43:17.0	18.826	0.0	63.123
3	22:43:18	23,71462	29,22473	58,23749	22:43:18.0	22.226	0.0	63.172
4	22:43:19	18,05679	12,59709	58,19966	22:43:19.0	23.714	1.0	63.163
5	22:43:20	24,49509	7,101928	58,14688	22:43:20.0	17.618	0.0	63.104
6	22:43:21	26,44613	17,19662	58,33456	22:43:21.0	24.28	0.0	63.086
7	22:43:22	22,80945	43,58442	58,32731	22:43:22.0	27.676	0.0	63.212
8	22:43:23	22,42639	17,78371	58,32779	22:43:23.0	25.551	0.0	63.185
9	22:43:24	26,71446	0,13489	58,31411	22:43:24.0	23.098	0.0	63.179
10	22:43:25	26,10626	27,70186	58,33324	22:43:25.0	24.369	0.0	63.176
11	22:43:26	23,20597	2,98298	58,32164	22:43:26.0	25.641	1.0	63.173
12	22:43:27	25,34999	2,239654	58,31385	22:43:27.0	23.043	0.0	63.171
13	22:43:28	22,3489	0	58,32437	22:43:28.0	25.422	0.0	63.168
14	22:43:29	19,11282	2,907659	58,3155	22:43:29.0	22.775	0.0	63.163
15	22:43:30	20,86701	2,702264	58,28374	22:43:30.0	18.95	0.0	63.162
16	22:43:31	20,59685	4,342261	58,32466	22:43:31.0	19.801	0.0	63.157
17	22:43:32	21,84153	0	58,31055	22:43:32.0	19.928	0.0	63.154
18	22:43:33	20,98324	5,750588	58,32215	22:43:33.0	21.634	0.0	63.159
19	22:43:34	21,84169	2,163206	58,32561	22:43:34.0	22.452	0.0	63.16
20	22:43:35	19,30779	0	58,31753	22:43:35.0	20.918	0.0	63.162
21	22:43:36	22,54403	1,212959	58,32148	22:43:36.0	20.922	0.0	63.165
22	22:43:37	19,77757	10,09527	58,31655	22:43:37.0	22.566	0.0	63.162
23	22:43:38	23,32439	0	58,32489	22:43:38.0	20.401	0.0	63.162
24	22:43:39	26,83628	0,634859	58,3236	22:43:39.0	20.517	0.0	63.157
25	22:43:40	19,03227	2,37397	58,32071	22:43:40.0	23.892	0.0	63.164
26	22:43:41	20,00782	2,80149	58,3265	22:43:41.0	24.456	0.0	63.177
27	22:43:42	18,25186	1,03397	58,32327	22:43:42.0	20.459	0.0	63.171

28	22:43:43	23,20599	11,69415	58,32129	22:43:43.0	17.41	0.0	63.175
29	22:43:44	21,80249	0,534371	58,32937	22:43:44.0	23.443	0.0	63.181
30	22:43:45	18,83707	0,900864	58,31892	22:43:45.0	21.999	0.0	63.182
31	22:43:46	21,76365	1,272994	58,31892	22:43:46.0	16.595	0.0	63.179
32	22:43:47	19,03214	0	58,32238	22:43:47.0	21.168	0.0	63.177
33	22:43:48	20,40488	4,996578	58,28262	22:43:48.0	18.535	0.0	63.176
34	22:43:49	21,95872	0,280459	58,29225	22:43:49.0	23.15	0.0	63.155
35	22:43:50	20,867	0,441766	58,293	22:43:50.0	21.598	0.0	63.148
36	22:43:51	23,79082	0	58,27575	22:43:51.0	20.459	0.0	63.15
37	22:43:52	24,30002	0,357127	58,27104	22:43:52.0	24.005	0.0	63.141
38	22:43:53	22,62115	3,176603	58,26762	22:43:53.0	21.98	0.0	63.136
39	22:43:54	23,01114	0,054941	58,05761	22:43:54.0	21.042	0.0	63.122
40	22:43:55	20,79807	0	58,0644	22:43:55.0	25.187	0.0	62.96
41	22:43:56	19,81255	0,448989	58,06722	22:43:56.0	22.892	0.0	62.956
42	22:43:57	23,01109	1,115743	58,0623	22:43:57.0	21.05	0.0	62.93
43	22:43:58	22,01336	2,044412	58,07743	22:43:58.0	22.468	0.0	62.923
44	22:43:59	23,12945	5,278509	58,06923	22:43:59.0	24.295	0.0	62.92
45	22:44:00	22,42637	0,071164	58,06746	22:44:00.0	22.53	0.0	62.918
46	22:44:01	20,59309	1,169384	58,07248	22:44:01.0	17.372	0.0	62.911
47	22:44:02	17,52649	19,61142	58,0606	22:44:02.0	23.016	0.0	62.909
48	22:44:03	20,78828	43,52769	58,03903	22:44:03.0	21.101	0.0	62.906
49	22:44:04	19,0321	8,039682	57,25465	22:44:04.0	19.652	0.0	62.902
50	22:44:05	21,25625	16,34573	57,21294	22:44:05.0	20.307	0.0	62.886
51	22:44:06	19,30777	34,09567	57,17282	22:44:06.0	21.807	1.0	61.767
52	22:44:07	17,47138	337,2779	57,15854	22:44:07.0	19.255	0.0	61.697
53	22:44:09	22,23145	107,9523	57,14458	22:44:09.0	20.082	1.0	61.679
54	22:44:10	21,17831	8,373087	57,06671	22:44:10.0	23.615	3.0	61.621
55	22:44:11	17,16366	62,72414	57,04607	22:44:11.0	21.454	0.0	61.614
56	22:44:12	21,61239	40,66617	57,03225	22:44:12.0	16.377	0.0	61.607
57	22:44:13	23,12924	7,683576	57,0037	22:44:13.0	20.714	0.0	61.597
58	22:44:14	17,16386	32,71061	56,99523	22:44:14.0	22.678	0.0	61.528
59	22:44:15	21,95872	25,49499	56,99012	22:44:15.0	19.776	0.0	61.524
60	22:44:16	18,6419	8,065234	56,99971	22:44:16.0	21.304	0.0	61.515
61	22:44:17	19,11302	70,34763	56,99246	22:44:17.0	17.599	0.0	61.51
62	22:44:18	18,91801	48,95306	56,99798	22:44:18.0	20.259	1.0	61.506
63	22:44:19	17,86152	25,13309	56,99765	22:44:19.0	17.772	0.0	61.474
64	22:44:20	20,67205	50,45096	57,00277	22:44:20.0	17.531	0.0	61.451
65	22:44:21	18,83717	54,74301	56,99435	22:44:21.0	21.417	1.0	61.444
66	22:44:22	17,94337	22,77379	56,99155	22:44:22.0	18.299	0.0	61.428
67	22:44:23	20,40424	9,920755	56,99607	22:44:23.0	18.307	1.0	61.42
68	22:44:24	17,74851	7,189128	57,00664	22:44:24.0	19.288	0.0	61.416
69	22:44:25	18,25173	9,174373	56,99153	22:44:25.0	16.977	0.0	61.415
70	22:44:26	29,37273	7,846523	56,99406	22:44:26.0	19.093	0.0	61.411
71	22:44:27	19,89241	7,21827	56,99263	22:44:27.0	24.645	0.0	61.408
72	22:44:28	24,30124	7,299466	57,001	22:44:28.0	24.766	0.0	61.407

73	22:44:29	22,73904	74,8213	56,98959	22:44:29.0	20.36	0.0	61.404
74	22:44:30	17,86155	18,03603	56,99657	22:44:30.0	22.53	2.0	61.413
75	22:44:31	25,91865	56,08912	56,99781	22:44:31.0	24.276	0.0	61.4
76	22:44:32	19,89257	5,844043	56,98488	22:44:32.0	25.804	1.0	61.399
77	22:44:33	18,91791	6,492535	56,98225	22:44:33.0	21.084	0.0	61.398
78	22:44:34	17,16382	45,73243	56,9971	22:44:34.0	17.133	0.0	61.395
79	22:44:35	19,03227	19,95864	56,99636	22:44:35.0	18.281	1.0	61.393
80	22:44:36	18,72305	10,97414	56,99715	22:44:36.0	18.368	2.0	61.393
81	22:44:37	19,50266	24,83105	56,98961	22:44:37.0	18.31	1.0	61.393
82	22:44:38	16,18929	98,39156	56,9931	22:44:38.0	19.535	0.0	61.393
83	22:44:39	20,78819	131,6057	56,9931	22:44:39.0	18.427	1.0	61.393
84	22:44:40	18,25166	15,82558	56,99593	22:44:40.0	18.515	2.0	61.396
85	22:44:41	16,30097	5,070076	56,991	22:44:41.0	19.214	0.0	61.391
86	22:44:42	21,45182	71,97843	56,99246	22:44:42.0	18.55	0.0	61.39
87	22:44:43	19,0323	34,47882	56,98985	22:44:43.0	19.87	1.0	61.39
88	22:44:44	17,86156	10,50595	56,99707	22:44:44.0	19.19	0.0	61.389
89	22:44:45	18,05672	8,331466	56,99722	22:44:45.0	19.517	0.0	61.389
90	22:44:46	18,05675	31,24956	56,98524	22:44:46.0	17.926	0.0	61.388
91	22:44:48	22,42632	41,43772	56,98708	22:44:48.0	19.648	2.0	61.388
92	22:44:49	21,56842	22,56263	56,99617	22:44:49.0	22.838	1.0	61.387
93	22:44:50	21,56171	9,046481	56,98646	22:44:50.0	22.062	0.0	61.387
94	22:44:51	22,03649	23,88946	56,98761	22:44:51.0	20.777	2.0	61.387
95	22:44:52	19,11287	15,88579	56,99456	22:44:52.0	21.519	0.0	61.387
96	22:44:53	19,81276	14,96813	56,98971	22:44:53.0	19.206	1.0	61.391
97	22:44:54	20,00775	6,765707	56,9982	22:44:54.0	20.007	0.0	61.391
98	22:44:55	18,83716	110,4038	56,98973	22:44:55.0	22.416	0.0	61.382
99	22:44:56	15,40957	28,66703	56,98787	22:44:56.0	17.193	0.0	61.381
100	22:44:57	14,51568	55,69093	56,9931	22:44:57.0	15.595	0.0	61.38
101	22:44:58	19,22734	8,499935	56,99506	22:44:58.0	14.225	1.0	61.38
102	22:44:59	17,55347	34,62012	57,00262	22:44:59.0	20.022	0.0	61.38
103	22:45:00	16,94426	42,97513	56,99626	22:45:00.0	17.911	0.0	61.38
104	22:45:01	17,14526	270,2004	56,99191	22:45:01.0	16.571	6.0	61.38
105	22:45:02	16,88608	10,50927	56,98799	22:45:02.0	17.151	0.0	61.378
106	22:45:03	17,94355	12,37256	56,9855	22:45:03.0	16.377	0.0	61.378
107	22:45:04	18,07722	21,02609	56,99724	22:45:04.0	18.317	0.0	61.378
108	22:45:05	17,74842	21,42809	56,9937	22:45:05.0	18.642	0.0	61.378
109	22:45:06	14,04525	68,63063	56,98725	22:45:06.0	16.679	1.0	61.377
110	22:45:07	15,72969	15,99916	56,99217	22:45:07.0	14.237	1.0	61.377
111	22:45:08	17,93514	25,1381	56,99057	22:45:08.0	15.746	0.0	61.377
112	22:45:09	17,35867	42,3014	56,99047	22:45:09.0	18.162	0.0	61.377
113	22:45:10	15,9945	18,58558	56,98909	22:45:10.0	16.953	0.0	61.377
114	22:45:11	16,38407	40,93099	56,98775	22:45:11.0	16.005	1.0	61.377
115	22:45:12	23,51954	12,79943	57,0466	22:45:12.0	16.546	0.0	61.377
116	22:45:13	24,30011	5,239678	57,16772	22:45:13.0	23.418	0.0	61.377
117	22:45:14	36,65482	5,223765	57,27003	22:45:14.0	26.302	0.0	61.608

118	22:45:15	31,12867	53,76041	57,26276	22:45:15.0	34.306	0.0	61.674
119	22:45:16	29,83289	80,60686	57,23973	22:45:16.0	31.137	1.0	61.7
120	22:45:17	30,3483	38,01034	57,21727	22:45:17.0	29.425	1.0	61.72
121	22:45:18	32,17174	14,04857	57,18418	22:45:18.0	30.136	1.0	61.696
122	22:45:19	32,68945	6,588917	57,14582	22:45:19.0	31.984	0.0	61.677
123	22:45:20	32,56158	14,94797	57,128	22:45:20.0	33.279	0.0	61.648
124	22:45:21	33,86297	28,11075	57,28514	22:45:21.0	31.147	2.0	61.629
125	22:45:22	34,4454	3,479244	57,2788	22:45:22.0	34.361	0.0	61.722
126	22:45:23	34,12098	20,56693	57,2783	22:45:23.0	33.465	0.0	61.758
127	22:45:24	37,37193	2,750407	57,28062	22:45:24.0	34.499	0.0	61.753
128	22:45:25	28,20199	4,316012	57,29148	22:45:25.0	36.475	0.0	61.78
129	22:45:26	31,32368	0,670641	57,29124	22:45:26.0	28.756	0.0	61.77
130	22:45:27	28,98238	2,83533	57,27771	22:45:27.0	29.053	0.0	61.751
131	22:45:28	35,4854	0	57,27737	22:45:28.0	30.947	0.0	61.753
132	22:45:29	33,53607	0,112649	57,26436	22:45:29.0	34.938	0.0	61.739
133	22:45:30	34,2503	23,54807	57,26379	22:45:30.0	32.285	0.0	61.73
134	22:45:31	31,58696	3,633807	57,25436	22:45:31.0	35.272	0.0	61.747
135	22:45:32	35,29028	1,17498	57,26565	22:45:32.0	30.349	0.0	61.735
136	22:45:33	32,49437	0,469945	57,27474	22:45:33.0	31.027	0.0	61.759
137	22:45:34	36,20119	0,072942	57,27175	22:45:34.0	33.205	0.0	61.746
138	22:45:35	39,38334	4,932586	57,26831	22:45:35.0	39.729	0.0	61.733
139	22:45:36	38,5425	2,14415	57,26859	22:45:36.0	37.818	1.0	61.747
140	22:45:37	39,71303	0,974476	57,26608	22:45:37.0	38.616	0.0	61.733
141	22:45:38	32,88466	6,253716	57,2696	22:45:38.0	39.463	0.0	61.756
142	22:45:39	35,87508	0	57,28086	22:45:39.0	28.991	0.0	61.736
143	22:45:40	33,14639	0,372041	57,26793	22:45:40.0	35.012	0.0	61.723
144	22:45:41	32,43417	5,163253	57,26462	22:45:41.0	38.225	0.0	61.717
145	22:45:42	36,0061	4,830182	57,26682	22:45:42.0	33.204	0.0	61.737
146	22:45:43	35,42087	0,343951	57,27445	22:45:43.0	35.78	0.0	61.726
147	22:45:44	34,83556	0	57,26132	22:45:44.0	35.021	0.0	61.751
148	22:45:45	32,29912	0	57,27551	22:45:45.0	30.639	0.0	61.732
149	22:45:46	30,48687	0,376654	57,27309	22:45:46.0	32.961	0.0	61.721
150	22:45:47	32,49437	7,096688	57,26111	22:45:47.0	31.913	0.0	61.73
151	22:45:48	37,62901	1,3005	57,31922	22:45:48.0	33.533	0.0	61.718
152	22:45:49	38,99342	23,28759	57,34562	22:45:49.0	33.142	0.0	61.737
153	22:45:50	31,51878	0,533358	57,34277	22:45:50.0	43.691	1.0	61.916
154	22:45:51	33,73111	0	57,33292	22:45:51.0	29.543	0.0	61.9
155	22:45:52	28,22183	0	57,34612	22:45:52.0	31.533	0.0	61.89
156	22:45:53	32,95146	0,953474	57,33823	22:45:53.0	31.913	0.0	61.918
157	22:45:54	32,49429	0	57,32649	22:45:54.0	31.142	0.0	61.902
158	22:45:55	33,73093	0,47594	57,32775	22:45:55.0	33.711	0.0	61.935
159	22:45:56	34,05527	0,617516	57,34294	22:45:56.0	32.295	0.0	61.921
160	22:45:57	36,59144	0	57,33608	22:45:57.0	30.41	0.0	61.905
161	22:45:58	39,38329	25,18356	57,34598	22:45:58.0	34.887	0.0	61.927
162	22:45:59	49,66346	1,872328	57,36645	22:45:59.0	35.867	0.0	61.924

163	22:46:00	55,51649	12,77034	57,38811	22:46:00.0	46.149	0.0	63.339
164	22:46:01	52,44233	70,04767	57,367	22:46:01.0	50.678	0.0	63.411
165	22:46:02	50,29814	2,555588	57,38654	22:46:02.0	55.674	2.0	62.776
166	22:46:03	49,46827	6,150152	57,37549	22:46:03.0	49.613	0.0	62.704
167	22:46:05	26,25106	5,515818	57,36987	22:46:05.0	37.715	0.0	61.58
168	22:46:06	34,31575	0,790832	57,36846	22:46:06.0	30.018	0.0	61.588
169	22:46:07	35,61601	1,980303	57,35913	22:46:07.0	35.532	0.0	61.574
170	22:46:08	42,44458	36,40984	57,37391	22:46:08.0	33.983	0.0	61.559
171	22:46:09	33,85994	5,343474	57,38436	22:46:09.0	39.91	0.0	61.602
172	22:46:10	33,66483	32,78281	57,32759	22:46:10.0	34.034	1.0	61.586
173	22:46:11	31,78202	13,62086	57,30568	22:46:11.0	32.035	0.0	61.582
174	22:46:12	25,66586	5,96191	57,28387	22:46:12.0	30.65	0.0	61.599
175	22:46:13	30,54331	14,38606	57,2563	22:46:13.0	29.302	0.0	61.583
176	22:46:14	31,90892	17,40257	57,21971	22:46:14.0	29.31	0.0	61.57
177	22:46:15	28,78742	20,00822	57,19613	22:46:15.0	29.775	0.0	61.568
178	22:46:16	33,73101	5,526547	57,15096	22:46:16.0	30.09	0.0	61.554
179	22:46:17	30,41753	6,200998	57,12276	22:46:17.0	33.2	0.0	61.552
180	22:46:18	33,14647	14,68771	57,06578	22:46:18.0	30.872	0.0	61.537
181	22:46:19	30,02769	53,82614	57,0652	22:46:19.0	32.995	0.0	61.515
182	22:46:20	30,40038	6,785969	57,0333	22:46:20.0	30.277	0.0	61.49
183	22:46:21	28,98227	23,51668	57,01977	22:46:21.0	29.67	2.0	61.479
184	22:46:22	30,02774	5,74248	57,02821	22:46:22.0	29.195	0.0	61.463
185	22:46:23	30,15293	8,151119	57,03488	22:46:23.0	29.02	0.0	61.448
186	22:46:24	31,71404	4,490313	57,02228	22:46:24.0	30.899	0.0	61.428
187	22:46:25	30,41753	23,71155	57,03101	22:46:25.0	31.196	1.0	61.416
188	22:46:26	31,58695	47,78861	57,034	22:46:26.0	30.335	0.0	61.394
189	22:46:27	23,01113	23,22381	57,03945	22:46:27.0	30.661	1.0	61.382
190	22:46:28	18,33801	20,3303	57,04079	22:46:28.0	23.802	0.0	61.378
191	22:46:29	15,60446	65,23731	57,04383	22:46:29.0	18.209	2.0	61.378
192	22:46:30	19,84745	80,2999	57,03175	22:46:30.0	15.572	0.0	61.379
193	22:46:31	18,13831	16,3477	57,0273	22:46:31.0	20.279	0.0	61.38
194	22:46:32	15,99444	7,786959	57,01974	22:46:32.0	17.389	0.0	61.381
195	22:46:33	19,42244	17,97905	57,01783	22:46:33.0	16.21	0.0	61.384
196	22:46:34	17,08118	31,05754	57,01596	22:46:34.0	19.376	0.0	61.38
197	22:46:35	16,30066	29,15543	57,01833	22:46:35.0	16.945	0.0	61.379
198	22:46:36	19,50267	9,498224	57,01977	22:46:36.0	16.745	3.0	61.381
199	22:46:37	19,5028	52,2515	57,02159	22:46:37.0	20.464	0.0	61.38
200	22:46:38	17,66638	63,28867	57,02663	22:46:38.0	19.725	2.0	61.38
201	22:46:39	24,49516	16,16506	57,02728	22:46:39.0	17.924	0.0	61.38
202	22:46:40	23,01106	7,020885	57,02549	22:46:40.0	25.343	0.0	61.379
203	22:46:41	24,35466	12,53986	57,02159	22:46:41.0	21.994	0.0	61.378
204	22:46:42	21,95857	13,76689	57,02462	22:46:42.0	23.973	0.0	61.378
205	22:46:43	19,03236	8,932487	57,01709	22:46:43.0	21.055	0.0	61.378
206	22:46:44	20,28242	8,132473	57,02271	22:46:44.0	20.129	0.0	61.378
207	22:46:45	17,47145	10,18622	57,02187	22:46:45.0	22.102	0.0	61.378

208	22:46:46	19,42241	23,56619	57,02489	22:46:46.0	16.886	0.0	61.378
209	22:46:47	19,22723	55,93227	57,01771	22:46:47.0	20.464	0.0	61.378
210	22:46:48	17,6667	87,49355	57,02988	22:46:48.0	18.112	2.0	61.378
211	22:46:49	17,27611	80,8056	57,02431	22:46:49.0	16.181	1.0	61.378
212	22:46:50	20,78931	36,88541	57,01819	22:46:50.0	19.347	1.0	61.377
213	22:46:51	18,33331	5,739091	57,01532	22:46:51.0	18.71	2.0	61.379
214	22:46:52	18,33331	19,21638	57,00965	22:46:52.0	19.85	0.0	61.379
215	22:46:53	15,99428	12,51458	57,01432	22:46:53.0	18.76	0.0	61.378
216	22:46:54	17,90623	12,78007	57,01604	22:46:54.0	17.177	0.0	61.378
217	22:46:55	18,25177	21,88721	57,02118	22:46:55.0	16.542	0.0	61.378
218	22:46:56	17,94295	46,89826	57,01822	22:46:56.0	17.312	0.0	61.378
219	22:46:57	19,81258	13,27847	57,04323	22:46:57.0	20.681	0.0	61.377
220	22:46:58	26,4714	78,04138	57,15139	22:46:58.0	18.352	0.0	61.377
221	22:46:59	28,46387	73,13782	57,17779	22:46:59.0	20.072	0.0	61.378
222	22:47:00	14,62992	30,41405	57,18279	22:47:00.0	36.049	0.0	61.519
223	22:47:01	18,25163	26,60751	57,17425	22:47:01.0	17.985	0.0	61.521
224	22:47:02	15,40952	47,80043	57,17781	22:47:02.0	15.423	0.0	61.52
225	22:47:03	17,55371	53,84348	57,1726	22:47:03.0	17.0	0.0	61.519
226	22:47:04	17,17976	32,91128	57,16772	22:47:04.0	16.587	0.0	61.519
227	22:47:05	16,80677	61,05261	57,16772	22:47:05.0	17.864	0.0	61.519
228	22:47:06	16,88603	12,10695	57,17083	22:47:06.0	16.741	3.0	61.518
229	22:47:07	15,60453	9,002459	57,16887	22:47:07.0	17.144	0.0	61.519
230	22:47:08	17,27644	52,14906	57,17342	22:47:08.0	18.305	0.0	61.506
231	22:47:09	18,13831	10,384	57,17327	22:47:09.0	14.683	0.0	61.505
232	22:47:10	15,52028	52,25076	57,17153	22:47:10.0	16.974	1.0	61.505
233	22:47:11	18,25575	31,98053	57,16966	22:47:11.0	17.389	0.0	61.511
234	22:47:12	25,47058	28,65891	57,21268	22:47:12.0	17.366	0.0	61.511
235	22:47:13	37,04458	5,067285	57,46481	22:47:13.0	23.397	2.0	61.516
236	22:47:14	32,17174	14,80707	57,42805	22:47:14.0	25.281	0.0	61.606
237	22:47:15	30,41776	52,85717	57,42855	22:47:15.0	37.735	0.0	61.799
238	22:47:16	28,66338	34,7326	57,39204	22:47:16.0	29.89	0.0	61.775
239	22:47:18	30,9335	56,89435	57,367	22:47:18.0	29.729	0.0	61.806
240	22:47:19	38,79861	36,55525	57,37085	22:47:19.0	35.867	0.0	62.338
241	22:47:20	37,62929	45,79262	57,1825	22:47:20.0	38.335	0.0	62.026
242	22:47:21	32,75661	34,6547	57,14828	22:47:21.0	32.548	2.0	61.992
243	22:47:22	44,45104	2,068973	57,32321	22:47:22.0	32.629	0.0	62.021
244	22:47:23	50,2487	27,20537	57,27474	22:47:23.0	46.534	0.0	62.2
245	22:47:24	34,90063	5,932362	57,25896	22:47:24.0	46.608	0.0	62.165
246	22:47:25	29,0535	2,848378	57,28772	22:47:25.0	34.613	0.0	62.128
247	22:47:26	32,95142	4,814095	57,29115	22:47:26.0	31.794	0.0	62.101
248	22:47:27	38,40897	2,8065	57,29361	22:47:27.0	32.262	0.0	62.115
249	22:47:28	36,00605	0,0937	57,2861	22:47:28.0	37.763	0.0	62.096
250	22:47:29	32,64831	0,055101	57,2844	22:47:29.0	35.219	0.0	62.076
251	22:47:30	45,56625	2,613514	57,29748	22:47:30.0	34.152	0.0	61.851
252	22:47:31	31,90917	0	57,29932	22:47:31.0	42.349	0.0	61.673

253	22:47:32	31,90918	2,743239	57,01769	22:47:32.0	32.868	0.0	61.687
254	22:47:33	36,26502	1,945508	57,019	22:47:33.0	32.122	0.0	61.17
255	22:47:34	34,83572	2,326847	57,01824	22:47:34.0	33.353	0.0	61.156
256	22:47:35	34,12096	0,793317	57,0195	22:47:35.0	35.178	0.0	61.139
257	22:47:36	38,01901	1,02735	57,0186	22:47:36.0	33.881	0.0	61.16
258	22:47:37	33,92579	2,810095	57,01692	22:47:37.0	37.755	0.0	61.146
259	22:47:38	35,09545	1,567898	57,01482	22:47:38.0	33.984	0.0	61.161
260	22:47:39	31,51893	0	57,03297	22:47:39.0	35.038	0.0	61.145
261	22:47:40	37,95707	6,049982	57,0296	22:47:40.0	30.576	0.0	61.132
262	22:47:41	34,31597	1,461078	57,03646	22:47:41.0	37.958	0.0	61.149
263	22:47:42	34,25031	0	57,03101	22:47:42.0	34.373	0.0	61.132
264	22:47:43	33,53624	1,552366	57,03278	22:47:43.0	33.838	0.0	61.162
265	22:47:44	35,61588	1,657943	57,03462	22:47:44.0	33.233	0.0	61.171
266	22:47:45	35,09543	5,372677	57,04065	22:47:45.0	35.701	0.0	61.155
267	22:47:46	33,34126	1,109148	57,03689	22:47:46.0	34.262	0.0	61.184
268	22:47:47	37,76215	0	57,04	22:47:47.0	32.87	0.0	61.161
269	22:47:48	38,73758	0	57,02931	22:47:48.0	37.506	0.0	61.153
270	22:47:49	36,59166	3,470786	57,04536	22:47:49.0	38.489	0.0	61.173
271	22:47:50	44,0611	0	57,05966	22:47:50.0	36.664	0.0	61.157
272	22:47:51	33,85996	0,066908	57,04151	22:47:51.0	44.697	0.0	61.211
273	22:47:52	35,42096	5,891368	57,18819	22:47:52.0	30.215	0.0	61.197
274	22:47:53	46,20533	3,429178	57,269	22:47:53.0	35.279	0.0	61.176
275	22:47:54	50,91719	8,416508	57,72485	22:47:54.0	44.595	0.0	61.425
276	22:47:55	30,31629	0	57,72112	22:47:55.0	56.752	0.0	62.88
277	22:47:56	33,26427	3,394981	57,73001	22:47:56.0	30.944	0.0	62.862
278	22:47:57	36,65453	1,861823	57,72126	22:47:57.0	31.917	0.0	62.884
279	22:47:58	31,97702	1,122741	57,7352	22:47:58.0	32.123	0.0	62.876
280	22:47:59	37,03954	3,581117	57,67482	22:47:59.0	33.921	0.0	62.875
281	22:48:00	37,76215	4,496761	57,6729	22:48:00.0	39.257	0.0	62.902
282	22:48:01	38,40902	2,816719	57,5327	22:48:01.0	38.365	0.0	62.886
283	22:48:02	36,06994	8,452938	57,51945	22:48:02.0	34.754	0.0	62.809
284	22:48:03	36,26488	1,010343	57,5338	22:48:03.0	37.375	0.0	62.804
285	22:48:04	34,05502	0	57,53464	22:48:04.0	34.097	0.0	62.79
286	22:48:05	34,51067	3,973968	57,52899	22:48:05.0	34.689	0.0	62.778
287	22:48:06	35,29007	0,201694	57,52191	22:48:06.0	34.686	0.0	62.803
288	22:48:07	40,51868	88,7883	57,54501	22:48:07.0	37.476	0.0	62.791
289	22:48:08	31,32365	327,4095	57,53963	22:48:08.0	36.307	4.0	62.796
290	22:48:09	35,42092	5,574923	57,52108	22:48:09.0	34.547	0.0	62.801
291	22:48:10	40,74786	17,10979	57,52816	22:48:10.0	31.274	0.0	62.787
292	22:48:11	35,81085	30,95053	57,50396	22:48:11.0	42.397	0.0	62.309
293	22:48:12	28,85846	5,691129	57,48597	22:48:12.0	32.368	0.0	62.3
294	22:48:13	33,46987	13,01513	57,44962	22:48:13.0	35.639	0.0	62.289
295	22:48:14	35,22582	9,57198	57,41975	22:48:14.0	33.088	0.0	62.268
296	22:48:15	30,34807	9,905375	57,39218	22:48:15.0	33.534	0.0	62.249
297	22:48:16	31,58706	49,27345	57,37138	22:48:16.0	30.631	0.0	62.223



298	22:48:17	33,14639	8,188696	57,3335	22:48:17.0	29.437	1.0	62.2
299	22:48:18	30,54343	10,69807	57,30432	22:48:18.0	31.448	0.0	62.185
300	22:48:19	27,22654	62,54731	57,2851	22:48:19.0	32.318	1.0	62.137
301	22:48:20	36,59148	40,09573	57,26706	22:48:20.0	30.896	0.0	62.109
302	22:48:21	33,92603	36,87209	57,24583	22:48:21.0	34.483	0.0	62.077
303	22:48:22	29,95812	73,1135	57,26006	22:48:22.0	31.98	0.0	62.053
304	22:48:23	28,59223	4,872113	57,25597	22:48:23.0	28.881	0.0	62.033
305	22:48:24	28,98241	7,256668	57,25097	22:48:24.0	32.533	0.0	62.019
306	22:48:25	25,27544	36,88891	57,25283	22:48:25.0	26.296	0.0	62.001
307	22:48:26	17,86152	15,71531	57,28608	22:48:26.0	29.577	0.0	61.986
308	22:48:27	17,55354	10,90309	57,26025	22:48:27.0	20.459	0.0	61.971
309	22:48:28	16,69091	28,43966	57,26132	22:48:28.0	18.572	0.0	61.971
310	22:48:29	17,7261	51,26571	57,22344	22:48:29.0	18.739	0.0	61.971
311	22:48:30	16,4958	12,09269	57,21955	22:48:30.0	17.187	0.0	61.963
312	22:48:31	18,44698	9,075809	57,21694	22:48:31.0	18.138	0.0	61.961
313	22:48:32	17,08121	10,84598	57,2145	22:48:32.0	15.927	0.0	61.96
314	22:48:33	17,74846	24,0555	57,21761	22:48:33.0	17.381	0.0	61.958
315	22:48:34	16,96895	10,00521	57,21034	22:48:34.0	18.665	0.0	61.955
316	22:48:35	18,66457	44,08747	57,21373	22:48:35.0	16.4	0.0	61.954
317	22:48:36	17,55374	19,72858	57,2156	22:48:36.0	18.295	1.0	61.953
318	22:48:37	17,37747	37,05534	57,21943	22:48:37.0	19.048	0.0	61.951
319	22:48:38	16,77407	80,30109	57,21711	22:48:38.0	18.757	0.0	61.951
320	22:48:40	16,38417	35,67002	57,21062	22:48:40.0	15.416	2.0	61.953
321	22:48:41	17,5514	23,17565	57,21433	22:48:41.0	17.735	0.0	61.952
322	22:48:42	19,79815	13,26893	57,21433	22:48:42.0	16.014	0.0	61.952
323	22:48:43	16,38419	6,023489	57,21907	22:48:43.0	19.337	1.0	61.952
324	22:48:44	18,64202	7,572071	57,22244	22:48:44.0	19.337	1.0	61.951
325	22:48:45	16,69094	9,763316	57,21986	22:48:45.0	17.197	1.0	61.95
326	22:48:46	18,25166	8,973525	57,21526	22:48:46.0	16.577	1.0	61.951
327	22:48:47	15,02476	72,4382	57,21804	22:48:47.0	18.924	1.0	61.951
328	22:48:48	17,08121	35,67737	57,22646	22:48:48.0	14.435	1.0	61.951
329	22:48:49	16,38419	52,95213	57,22459	22:48:49.0	17.939	1.0	61.95
330	22:48:50	20,33398	13,40644	57,21978	22:48:50.0	16.41	0.0	61.949
331	22:48:51	17,16366	24,68056	57,22471	22:48:51.0	20.36	2.0	61.949
332	22:48:52	21,17831	19,60212	57,22208	22:48:52.0	17.343	0.0	61.949
333	22:48:53	24,37089	12,17623	57,03582	22:48:53.0	20.413	0.0	61.949
334	22:48:54	22,79761	5,320528	57,02921	22:48:54.0	24.753	0.0	61.803
335	22:48:55	23,01107	28,3282	57,03942	22:48:55.0	22.829	1.0	61.795
336	22:48:56	22,15388	53,88908	57,03302	22:48:56.0	22.778	1.0	61.792
337	22:48:57	17,55357	32,41173	57,03716	22:48:57.0	22.062	0.0	61.788
338	22:48:58	20,08118	13,57217	57,0427	22:48:58.0	17.328	0.0	61.787
339	22:48:59	17,32274	24,52969	57,05155	22:48:59.0	19.924	0.0	61.787
340	22:49:00	16,18924	8,870604	57,04387	22:49:00.0	17.577	0.0	61.786
341	22:49:01	16,18932	40,16664	57,04387	22:49:01.0	15.998	0.0	61.785
342	22:49:02	15,9945	7,754169	57,04576	22:49:02.0	16.361	0.0	61.786

343	22:49:03	20,67208	7,358254	57,04347	22:49:03.0	16.402	0.0	61.785
344	22:49:04	18,49566	13,79964	57,04129	22:49:04.0	19.698	0.0	61.782
345	22:49:05	17,35877	35,89937	57,22954	22:49:05.0	19.1	0.0	61.78
346	22:49:06	24,37542	54,76894	57,04459	22:49:06.0	17.523	0.0	61.86
347	22:49:07	17,16275	18,26432	57,04129	22:49:07.0	24.474	0.0	59.42
348	22:49:08	16,96893	9,017613	57,04519	22:49:08.0	16.766	0.0	60.271
349	22:49:09	18,32034	37,13985	57,04564	22:49:09.0	17.403	0.0	60.464
350	22:49:10	20,66624	32,32117	57,03799	22:49:10.0	17.679	1.0	60.593
351	22:49:11	15,79957	24,1678	57,03316	22:49:11.0	19.156	0.0	60.664
352	22:49:12	23,18085	14,24742	57,08919	22:49:12.0	18.058	0.0	60.663
353	22:49:13	33,66496	7,547841	57,16818	22:49:13.0	23.507	0.0	60.705
354	22:49:14	37,41125	0	57,34507	22:49:14.0	26.275	0.0	60.747
355	22:49:15	34,70648	41,87602	57,33282	22:49:15.0	43.506	0.0	61.15
356	22:49:16	28,00695	78,43887	57,29906	22:49:16.0	35.283	0.0	61.276
357	22:49:17	31,12849	71,51989	57,26517	22:49:17.0	27.424	1.0	61.299
358	22:49:18	33,07965	15,69361	57,23772	22:49:18.0	29.763	1.0	61.323
359	22:49:19	31,39224	36,34748	57,20304	22:49:19.0	32.797	0.0	61.284
360	22:49:20	34,70549	23,0976	57,19735	22:49:20.0	29.725	0.0	61.257
361	22:49:21	33,73095	6,699386	57,33361	22:49:21.0	33.721	0.0	61.316
362	22:49:22	35,48507	5,017807	57,33966	22:49:22.0	34.866	0.0	61.3
363	22:49:23	35,68011	2,71788	57,33036	22:49:23.0	34.625	0.0	61.467
364	22:49:24	36,06994	9,493234	57,33804	22:49:24.0	35.594	0.0	61.457
365	22:49:25	35,7443	3,591123	57,3389	22:49:25.0	35.717	0.0	61.438
366	22:49:26	34,51067	0,636048	57,35019	22:49:26.0	34.237	0.0	61.464
367	22:49:27	32,75655	3,574292	57,34015	22:49:27.0	34.725	0.0	61.452
368	22:49:28	31,19735	1,012681	57,35588	22:49:28.0	34.892	0.0	61.507
369	22:49:29	31,58712	0,756396	57,34206	22:49:29.0	33.345	0.0	61.528
370	22:49:30	26,9107	0,76014	57,34349	22:49:30.0	32.036	0.0	61.527
371	22:49:31	22,0366	2,928621	57,346	22:49:31.0	28.231	0.0	61.551
372	22:49:32	24,13684	4,281021	57,35112	22:49:32.0	21.301	0.0	61.546
373	22:49:33	24,8652	1,530158	57,35487	22:49:33.0	20.27	0.0	61.544
374	22:49:34	20,85109	27,3564	57,34481	22:49:34.0	21.334	0.0	61.549
375	22:49:35	17,27627	3,550869	57,3411	22:49:35.0	26.345	0.0	61.543
376	22:49:36	25,57313	1,871438	57,34612	22:49:36.0	23.059	0.0	61.542
377	22:49:37	20,86715	0,068986	57,34729	22:49:37.0	24.835	0.0	61.549
378	22:49:38	21,17833	3,612494	57,34612	22:49:38.0	19.545	0.0	61.549
379	22:49:39	24,30008	3,646043	57,35344	22:49:39.0	23.381	0.0	61.558
380	22:49:40	21,56857	0	57,3449	22:49:40.0	18.722	0.0	61.553
381	22:49:41	21,062	2,356098	57,32101	22:49:41.0	22.816	0.0	61.568
382	22:49:42	22,03658	5,705635	57,35279	22:49:42.0	22.948	0.0	61.565
383	22:49:43	26,4466	27,23482	57,34232	22:49:43.0	20.998	0.0	61.567
384	22:49:44	22,73877	9,567642	57,35176	22:49:44.0	26.214	8.0	61.582

## RECOPIACIÓN DE DATOS

### ENTITY FRAMEWORK MÉTODO INSERTAR

**Tabla 33.** Datos ENTITY FRAMEWORK Insertar

ENTITY FRAMEWORK								
Insertar								
N°	Código				Jmeter			
	Tiempo	CPU	Disco	Memoria	Tiempo	CPU	Disco	Memoria
1	18:09:17	22,91244	2,528513	57,63106	18:09:17.0	3.962	0.0	58.798
2	18:09:18	25,9348	1,388142	57,42344	18:09:18.0	24.934	0.0	58.88
3	18:09:19	20,86696	3,38066	57,36831	18:09:19.0	21.112	0.0	58.991
4	18:09:20	26,25105	2,541592	57,36367	18:09:20.0	26.936	0.0	59.093
5	18:09:21	23,90982	1,656432	57,35119	18:09:21.0	24.667	0.0	59.077
6	18:09:22	21,17824	0	57,36592	18:09:22.0	22.588	0.0	59.12
7	18:09:23	20,39787	6,707657	57,37037	18:09:23.0	26.141	0.0	59.135
8	18:09:24	22,34885	1,173852	57,36253	18:09:24.0	22.176	0.0	59.294
9	18:09:25	23,59584	9,295071	57,35999	18:09:25.0	17.544	1.0	59.364
10	18:09:26	24,17608	9,175958	57,35784	18:09:26.0	22.607	0.0	59.369
11	18:09:27	24,69023	1,399338	57,3538	18:09:27.0	23.577	0.0	59.521
12	18:09:28	26,68692	19,46142	57,35222	18:09:28.0	24.766	0.0	59.552
13	18:09:29	22,30908	7,297762	57,36181	18:09:29.0	26.309	0.0	59.646
14	18:09:31	20,22128	5,557819	57,36009	18:09:31.0	24.125	0.0	59.255
15	18:09:32	26,1296	0	57,34512	18:09:32.0	19.535	0.0	59.334
16	18:09:33	22,34902	0,8674684	57,36312	18:09:33.0	25.505	0.0	59.349
17	18:09:34	22,73916	0,2556756	57,34208	18:09:34.0	23.64	0.0	59.466
18	18:09:35	28,78742	0,06844649	57,34373	18:09:35.0	21.794	0.0	59.553
19	18:09:36	23,71416	1,438995	57,36121	18:09:36.0	28.221	0.0	59.616
20	18:09:37	25,34995	12,74286	57,33823	18:09:37.0	24.221	0.0	59.726
21	18:09:38	23,90978	0	57,36642	18:09:38.0	25.641	0.0	59.783
22	18:09:39	21,76365	0,1903557	57,34899	18:09:39.0	26.003	0.0	59.812
23	18:09:40	26,12974	0,6218122	57,35332	18:09:40.0	21.043	0.0	59.92
24	18:09:41	21,17585	1,340694	57,36913	18:09:41.0	25.419	0.0	59.958
25	18:09:42	23,40094	0	57,36736	18:09:42.0	20.678	0.0	60.115
26	18:09:43	23,6719	0,2546822	57,36057	18:09:43.0	23.437	0.0	60.128
27	18:09:44	20,78815	0,5794879	57,35806	18:09:44.0	23.618	0.0	60.129
28	18:09:45	23,98559	0,06696128	57,35535	18:09:45.0	20.86	0.0	60.131
29	18:09:46	20,30693	2,439806	57,34313	18:09:46.0	23.812	0.0	60.143
30	18:09:47	23,71471	1,020424	57,35471	18:09:47.0	20.009	0.0	60.139
31	18:09:48	24,76579	0,2950313	57,33696	18:09:48.0	24.781	0.0	60.153
32	18:09:49	24,3755	0,4151045	57,34744	18:09:49.0	24.128	0.0	60.153
33	18:09:50	23,51948	0,284505	57,33565	18:09:50.0	24.462	0.0	60.148
34	18:09:51	20,59297	0	57,34356	18:09:51.0	23.148	0.0	60.158
35	18:09:52	22,07472	5,49375	57,33481	18:09:52.0	20.236	0.0	60.15
36	18:09:53	26,56878	0	57,34756	18:09:53.0	23.393	0.0	60.147

37	18:09:54	20,67209	0,2720367	57,34691	18:09:54.0	23.929	0.0	60.152
38	18:09:55	22,93437	3,491299	57,35184	18:09:55.0	23.583	0.0	60.149
39	18:09:56	19,63011	27,02203	57,31099	18:09:56.0	23.197	0.0	60.152
40	18:09:57	22,544	22,30156	57,2823	18:09:57.0	19.678	0.0	60.154
41	18:09:58	26,12957	65,17489	57,24863	18:09:58.0	20.092	0.0	60.148
42	18:09:59	20,67218	14,02115	57,25145	18:09:59.0	28.063	0.0	60.099
43	18:10:00	22,93428	15,32984	57,21455	18:10:00.0	22.072	0.0	60.097
44	18:10:01	20,47727	14,63134	57,17174	18:10:01.0	22.164	0.0	60.082
45	18:10:02	18,84524	8,033442	57,12731	18:10:02.0	19.513	0.0	60.046
46	18:10:03	20,78817	67,80006	57,11746	18:10:03.0	18.525	0.0	60.045
47	18:10:04	21,16471	57,06874	57,12011	18:10:04.0	21.444	1.0	60.037
48	18:10:05	19,5027	38,75401	57,07637	18:10:05.0	20.858	1.0	59.98
49	18:10:06	22,334	14,85506	57,0582	18:10:06.0	21.61	0.0	59.976
50	18:10:07	21,64677	8,510523	57,05188	18:10:07.0	22.282	0.0	59.97
51	18:10:08	19,30776	61,2798	57,05645	18:10:08.0	18.605	0.0	59.972
52	18:10:09	19,50262	26,66492	57,06004	18:10:09.0	21.846	1.0	59.963
53	18:10:10	16,38413	79,37781	57,04029	18:10:10.0	18.24	0.0	59.933
54	18:10:11	18,05678	61,68788	57,06588	18:10:11.0	18.446	0.0	59.901
55	18:10:12	20,2028	81,19263	57,07109	18:10:12.0	16.856	1.0	59.894
56	18:10:13	22,13516	75,69076	57,05765	18:10:13.0	20.074	0.0	59.87
57	18:10:14	19,68735	7,318975	57,05672	18:10:14.0	20.309	2.0	59.867
58	18:10:15	20,78816	9,319006	57,06336	18:10:15.0	22.548	0.0	59.861
59	18:10:16	25,86082	9,119513	57,04863	18:10:16.0	21.364	0.0	59.86
60	18:10:17	26,51809	7,578805	57,07214	18:10:17.0	26.013	0.0	59.854
61	18:10:18	22,62133	15,38925	57,06207	18:10:18.0	22.994	0.0	59.853
62	18:10:19	22,54414	38,98843	57,05758	18:10:19.0	25.684	0.0	59.845
63	18:10:20	21,64686	26,51346	57,07362	18:10:20.0	22.18	1.0	59.838
64	18:10:21	19,22705	30,69824	57,06229	18:10:21.0	19.462	0.0	59.832
65	18:10:22	20,47712	55,07656	57,07228	18:10:22.0	21.392	0.0	59.818
66	18:10:23	21,56864	30,25025	57,05894	18:10:23.0	23.527	2.0	59.806
67	18:10:24	19,66825	10,08459	57,04983	18:10:24.0	17.116	1.0	59.807
68	18:10:25	16,88597	7,143662	57,05217	18:10:25.0	21.443	0.0	59.807
69	18:10:26	17,72755	43,13789	57,062	18:10:26.0	17.124	0.0	59.805
70	18:10:27	19,61758	20,78439	57,04825	18:10:27.0	19.514	0.0	59.804
71	18:10:28	19,22724	14,39254	57,0528	18:10:28.0	16.766	1.0	59.806
72	18:10:29	18,63552	7,414225	57,05533	18:10:29.0	18.767	0.0	59.805
73	18:10:30	22,4026	73,08587	57,07372	18:10:30.0	19.442	0.0	59.803
74	18:10:31	20,20292	21,66478	57,0834	18:10:31.0	20.529	1.0	59.803
75	18:10:32	15,32518	18,84703	57,06951	18:10:32.0	20.042	0.0	59.803
76	18:10:33	22,34896	7,34258	57,06124	18:10:33.0	18.98	0.0	59.804
77	18:10:34	18,33324	64,88011	57,06351	18:10:34.0	16.42	0.0	59.804
78	18:10:35	20,59295	44,1308	57,06877	18:10:35.0	23.141	1.0	59.803
79	18:10:36	22,73913	9,962533	57,09098	18:10:36.0	20.853	0.0	59.803
80	18:10:37	20,04827	7,961234	57,07989	18:10:37.0	19.147	0.0	59.803
81	18:10:38	22,544	15,86991	57,08759	18:10:38.0	22.844	0.0	59.809

82	18:10:39	20,47721	108,7017	57,06982	18:10:39.0	21.223	0.0	59.809
83	18:10:40	16,77407	20,40296	57,0522	18:10:40.0	21.192	2.0	59.807
84	18:10:41	20,2028	13,36092	57,08123	18:10:41.0	18.517	0.0	59.807
85	18:10:42	22,5344	12,042	57,0851	18:10:42.0	16.412	0.0	59.806
86	18:10:43	18,68382	17,92969	56,99997	18:10:43.0	21.772	1.0	59.805
87	18:10:44	19,60844	16,8563	56,98887	18:10:44.0	21.4	0.0	59.805
88	18:10:46	20,47743	8,978928	57,00267	18:10:46.0	19.924	0.0	59.748
89	18:10:47	20,99328	26,306	56,99765	18:10:47.0	21.783	0.0	59.745
90	18:10:48	21,95872	41,05275	57,02089	18:10:48.0	19.332	0.0	59.743
91	18:10:49	23,0112	65,73811	57,02307	18:10:49.0	22.189	0.0	59.745
92	18:10:50	18,52819	12,21759	57,01305	18:10:50.0	22.309	0.0	59.744
93	18:10:51	22,57828	101,9906	57,02443	18:10:51.0	21.13	0.0	59.756
94	18:10:52	23,94238	36,08183	56,99581	18:10:52.0	21.067	0.0	59.765
95	18:10:53	19,81266	7,459402	56,9966	18:10:53.0	23.568	0.0	59.743
96	18:10:54	21,56842	29,4577	57,0058	18:10:54.0	21.621	1.0	59.745
97	18:10:55	21,36962	73,14227	57,00329	18:10:55.0	21.828	0.0	59.745
98	18:10:56	22,03642	12,31507	57,01475	18:10:56.0	22.252	0.0	59.744
99	18:10:57	18,10565	25,10414	57,0054	18:10:57.0	22.581	0.0	59.746
100	18:10:58	24,74309	75,56279	57,01501	18:10:58.0	18.126	1.0	59.747
101	18:10:59	22,81597	52,77879	57,03519	18:10:59.0	24.362	0.0	59.747
102	18:11:00	23,59596	88,67261	57,05418	18:11:00.0	23.894	0.0	59.767
103	18:11:01	21,45179	226,1317	57,05839	18:11:01.0	23.688	3.0	59.825
104	18:11:02	18,70451	139,8355	57,03871	18:11:02.0	21.177	1.0	59.822
105	18:11:03	20,28245	146,0252	57,03622	18:11:03.0	18.376	1.0	59.81
106	18:11:04	20,20276	140,2034	57,04225	18:11:04.0	20.249	1.0	59.807
107	18:11:05	23,59585	113,9147	57,08106	18:11:05.0	20.1	2.0	59.812
108	18:11:06	20,5929	123,4229	57,07109	18:11:06.0	24.404	1.0	59.88
109	18:11:07	22,15374	158,0715	57,08895	18:11:07.0	20.602	1.0	59.9
110	18:11:08	23,51958	255,5251	57,08426	18:11:08.0	21.827	2.0	59.904
111	18:11:09	17,74868	349,0165	57,08857	18:11:09.0	23.881	6.0	59.913
112	18:11:10	17,55371	184,2206	57,09426	18:11:10.0	18.637	0.0	59.936
113	18:11:11	17,74865	138,1819	57,05566	18:11:11.0	18.523	2.0	59.942
114	18:11:12	19,2273	30,88186	57,03988	18:11:12.0	17.628	1.0	59.882
115	18:11:13	18,33305	7,628584	57,06889	18:11:13.0	19.003	1.0	59.868
116	18:11:14	18,25188	13,39382	57,07817	18:11:14.0	17.673	0.0	59.867
117	18:11:15	23,40091	16,24542	57,3614	18:11:15.0	18.008	0.0	59.873
118	18:11:16	26,71438	1,987266	57,36681	18:11:16.0	21.314	0.0	59.979
119	18:11:17	29,05332	0,22365	57,37264	18:11:17.0	27.076	0.0	60.128
120	18:11:18	33,93133	3,868245	57,37044	18:11:18.0	26.263	0.0	60.149
121	18:11:19	38,27555	2,641037	57,37592	18:11:19.0	35.124	0.0	60.204
122	18:11:20	36,0063	32,15502	57,38142	18:11:20.0	37.557	0.0	60.191
123	18:11:21	38,01907	0,3029743	57,355	18:11:21.0	36.172	8.0	60.255
124	18:11:22	41,19609	2,920831	57,3616	18:11:22.0	37.928	0.0	60.213
125	18:11:23	35,29015	2,262199	57,35308	18:11:23.0	39.184	0.0	60.196
126	18:11:24	38,7987	0,07605835	57,36214	18:11:24.0	34.495	0.0	60.168

127	18:11:25	36,39659	0	57,37991	18:11:25.0	38.361	0.0	60.215
128	18:11:26	37,43436	2,13765	57,36353	18:11:26.0	40.256	0.0	60.24
129	18:11:27	33,46981	2,03208	57,37044	18:11:27.0	34.986	0.0	60.255
130	18:11:28	37,17702	6,730623	57,36571	18:11:28.0	35.788	0.0	60.225
131	18:11:29	37,95709	19,89721	57,3564	18:11:29.0	35.467	0.0	60.243
132	18:11:30	34,70574	2,823444	57,36446	18:11:30.0	33.333	0.0	60.227
133	18:11:31	31,19727	1,904753	57,37001	18:11:31.0	34.315	0.0	60.208
134	18:11:32	38,79876	0	57,3498	18:11:32.0	36.27	0.0	60.236
135	18:11:33	33,53605	3,465897	57,35129	18:11:33.0	37.797	0.0	60.223
136	18:11:34	33,27482	1,670865	57,3444	18:11:34.0	33.592	0.0	60.204
137	18:11:35	37,95723	0	57,34859	18:11:35.0	33.337	0.0	60.221
138	18:11:36	36,65463	0,2013342	57,36291	18:11:36.0	32.938	0.0	60.203
139	18:11:37	31,72316	0,4810228	57,37704	18:11:37.0	35.588	0.0	60.195
140	18:11:38	36,98183	2,94722	57,36124	18:11:38.0	35.388	0.0	60.23
141	18:11:39	33,2747	0,5327984	57,37714	18:11:39.0	36.618	0.0	60.217
142	18:11:40	31,90917	0	57,35255	18:11:40.0	34.173	0.0	60.243
143	18:11:41	37,62918	1,068861	57,35114	18:11:41.0	34.556	0.0	60.226
144	18:11:42	31,90906	0,4588372	57,38663	18:11:42.0	34.373	0.0	60.211
145	18:11:43	33,92603	3,48271	57,38575	18:11:43.0	30.41	0.0	60.217
146	18:11:44	38,01917	0	57,39256	18:11:44.0	32.507	0.0	60.229
147	18:11:45	37,17682	2,305155	57,38419	18:11:45.0	37.649	0.0	60.233
148	18:11:46	34,83566	0,6934447	57,38883	18:11:46.0	37.98	0.0	60.249
149	18:11:47	35,42089	0	57,39043	18:11:47.0	36.956	0.0	60.236
150	18:11:48	42,65004	0,06929061	57,40387	18:11:48.0	35.347	0.0	60.266
151	18:11:49	33,34116	3,53966	57,42274	18:11:49.0	33.403	0.0	60.251
152	18:11:50	33,8603	0,8502741	57,42176	18:11:50.0	39.943	0.0	60.278
153	18:11:51	33,5361	0	57,3928	18:11:51.0	33.354	0.0	60.327
154	18:11:52	33,3708	0,07558336	57,39565	18:11:52.0	35.248	0.0	60.3
155	18:11:53	35,87524	1,029045	57,40615	18:11:53.0	32.848	0.0	60.284
156	18:11:54	33,92841	2,525498	57,39923	18:11:54.0	38.426	0.0	60.293
157	18:11:55	36,84957	0	57,39751	18:11:55.0	30.96	0.0	60.282
158	18:11:56	34,70675	2,828093	57,40385	18:11:56.0	34.979	0.0	60.279
159	18:11:58	35,09547	0,1425545	57,11246	18:11:58.0	34.118	0.0	60.287
160	18:11:59	33,46973	1,039316	57,15734	18:11:59.0	35.264	0.0	59.88
161	18:12:00	34,31574	1,605191	57,1362	18:12:00.0	38.939	0.0	59.859
162	18:12:01	39,96816	14,29058	57,14209	18:12:01.0	30.822	0.0	59.844
163	18:12:02	34,90052	5,83983	57,11318	18:12:02.0	39.104	0.0	59.875
164	18:12:03	34,44545	6,418172	57,07475	18:12:03.0	34.952	0.0	59.858
165	18:12:04	34,51062	14,57873	57,04875	18:12:04.0	33.395	0.0	59.846
166	18:12:05	32,75661	7,460115	57,02391	18:12:05.0	34.117	0.0	59.834
167	18:12:06	30,93353	19,62094	56,99203	18:12:06.0	32.673	0.0	59.813
168	18:12:07	37,23949	300,9064	56,99408	18:12:07.0	32.868	0.0	59.774
169	18:12:08	36,84968	16,58402	56,97256	18:12:08.0	36.003	0.0	59.768
170	18:12:09	37,23917	5,287884	56,9162	18:12:09.0	35.363	0.0	59.748
171	18:12:10	33,27477	29,5533	56,89322	18:12:10.0	36.667	0.0	59.685

172	18:12:11	33,92604	24,4295	56,86215	18:12:11.0	33.07	0.0	59.665
173	18:12:12	30,93346	73,05192	56,83829	18:12:12.0	33.284	0.0	59.647
174	18:12:13	29,3727	8,372681	56,83726	18:12:13.0	30.678	1.0	59.603
175	18:12:14	34,12103	21,8188	56,85448	18:12:14.0	29.643	0.0	59.588
176	18:12:15	30,93353	5,130532	56,84876	18:12:15.0	32.817	0.0	59.571
177	18:12:16	30,22264	56,35163	56,84591	18:12:16.0	31.079	0.0	59.553
178	18:12:17	20,08733	17,44937	56,84271	18:12:17.0	30.431	4.0	59.538
179	18:12:18	20,00778	76,97576	56,8375	18:12:18.0	20.927	0.0	59.535
180	18:12:19	17,56664	46,31064	56,83628	18:12:19.0	19.904	2.0	59.535
181	18:12:20	18,44685	8,041454	56,84613	18:12:20.0	16.789	0.0	59.53
182	18:12:21	17,55374	51,60213	56,83527	18:12:21.0	18.785	0.0	59.53
183	18:12:22	19,87597	26,30887	56,85139	18:12:22.0	17.544	1.0	59.528
184	18:12:23	18,05666	8,392556	56,85192	18:12:23.0	20.104	0.0	59.524
185	18:12:24	18,83706	24,30278	56,85072	18:12:24.0	17.519	0.0	59.529
186	18:12:25	17,66641	7,931624	56,8568	18:12:25.0	19.665	0.0	59.531
187	18:12:26	20,78823	18,68242	56,87659	18:12:26.0	19.339	0.0	59.541
188	18:12:27	22,62114	16,21628	56,88104	18:12:27.0	20.513	0.0	59.549
189	18:12:28	24,69023	10,26582	56,86132	18:12:28.0	19.083	1.0	59.587
190	18:12:29	20,60647	49,87207	56,85151	18:12:29.0	24.716	0.0	59.575
191	18:12:30	22,15342	65,73118	56,86002	18:12:30.0	23.3	1.0	59.572
192	18:12:31	22,544	17,95824	56,85173	18:12:31.0	22.373	0.0	59.569
193	18:12:32	20,98313	9,188781	56,86179	18:12:32.0	24.006	0.0	59.572
194	18:12:33	19,2273	25,33593	56,85118	18:12:33.0	21.689	0.0	59.571
195	18:12:34	16,6909	50,48075	56,85294	18:12:34.0	18.09	0.0	59.571
196	18:12:35	17,35883	12,57698	56,84749	18:12:35.0	17.404	1.0	59.569
197	18:12:36	18,6601	15,84947	56,86089	18:12:36.0	18.547	0.0	59.568
198	18:12:37	19,42232	31,84099	56,85187	18:12:37.0	18.939	2.0	59.565
199	18:12:38	18,25185	93,59165	56,84649	18:12:38.0	16.589	0.0	59.568
200	18:12:39	19,65211	93,01182	56,84443	18:12:39.0	19.532	1.0	59.565
201	18:12:40	17,74862	38,31611	56,85192	18:12:40.0	20.102	0.0	59.563
202	18:12:41	15,52031	129,7771	56,85211	18:12:41.0	16.827	0.0	59.562
203	18:12:42	17,55367	41,55149	56,85402	18:12:42.0	17.219	1.0	59.561
204	18:12:43	17,74843	23,70693	56,85517	18:12:43.0	18.488	1.0	59.562
205	18:12:44	18,4469	51,52322	56,87662	18:12:44.0	16.002	0.0	59.559
206	18:12:45	15,60457	15,01415	56,88145	18:12:45.0	17.354	1.0	59.559
207	18:12:46	18,64193	14,19223	56,86153	18:12:46.0	18.152	0.0	59.565
208	18:12:47	17,47135	160,6492	56,87559	18:12:47.0	18.336	0.0	59.565
209	18:12:49	18,9179	72,03447	56,86858	18:12:49.0	18.079	1.0	59.563
210	18:12:50	16,57923	30,64377	56,87212	18:12:50.0	18.486	1.0	59.567
211	18:12:51	16,3824	17,57301	56,86117	18:12:51.0	17.389	0.0	59.57
212	18:12:52	17,66635	13,14359	56,84704	18:12:52.0	15.821	0.0	59.569
213	18:12:53	19,81265	15,93494	56,8506	18:12:53.0	18.122	0.0	59.565
214	18:12:54	18,05659	16,69098	56,84108	18:12:54.0	19.932	0.0	59.565
215	18:12:55	20,08755	63,47518	56,84632	18:12:55.0	17.911	0.0	59.562
216	18:12:56	17,31926	17,79945	56,85062	18:12:56.0	19.676	0.0	59.562

217	18:12:57	15,71549	27,31868	56,85605	18:12:57.0	17.295	0.0	59.561
218	18:12:58	19,42235	48,31802	56,87062	18:12:58.0	15.616	0.0	59.561
219	18:12:59	19,89255	33,35371	56,87356	18:12:59.0	19.147	0.0	59.566
220	18:13:00	23,71462	127,4696	56,88406	18:13:00.0	19.703	0.0	59.581
221	18:13:01	25,90138	115,7508	57,04361	18:13:01.0	23.143	1.0	59.604
222	18:13:02	27,81183	126,7686	56,93301	18:13:02.0	25.919	1.0	59.834
223	18:13:03	18,33331	135,6887	56,94439	18:13:03.0	28.497	2.0	59.746
224	18:13:04	16,77398	144,803	56,94274	18:13:04.0	18.475	1.0	59.728
225	18:13:05	15,80014	128,07	56,92674	18:13:05.0	16.818	1.0	59.726
226	18:13:06	17,47141	107,0889	56,91519	18:13:06.0	15.814	1.0	59.72
227	18:13:07	18,52493	143,0209	56,91311	18:13:07.0	17.718	1.0	59.714
228	18:13:08	19,29614	253,5484	56,92827	18:13:08.0	16.41	2.0	59.709
229	18:13:09	22,03652	197,0279	56,94272	18:13:09.0	20.858	3.0	59.706
230	18:13:10	16,96901	310,0262	56,92005	18:13:10.0	22.037	2.0	59.711
231	18:13:11	18,25175	35,63795	56,99827	18:13:11.0	16.747	2.0	59.715
232	18:13:12	27,61679	263,6971	57,00212	18:13:12.0	15.446	3.0	59.715
233	18:13:13	19,50283	219,0451	57,00939	18:13:13.0	29.819	3.0	59.885
234	18:13:14	19,61751	298,2471	57,01656	18:13:14.0	19.665	2.0	59.897
235	18:13:15	25,73998	279,0956	57,34629	18:13:15.0	17.41	4.0	59.905
236	18:13:16	35,29043	223,3083	57,35748	18:13:16.0	18.16	3.0	59.916
237	18:13:17	37,82427	191,4091	57,36284	18:13:17.0	34.225	1.0	60.21
238	18:13:18	36,98162	137,6784	57,37936	18:13:18.0	40.317	2.0	60.289
239	18:13:19	42,11206	113,2922	57,38998	18:13:19.0	38.502	1.0	60.309
240	18:13:20	41,91718	131,9892	57,42033	18:13:20.0	40.66	1.0	60.352
241	18:13:21	33,34106	4,269134	57,41518	18:13:21.0	41.155	1.0	60.46
242	18:13:22	34,44546	0,216807	57,43121	18:13:22.0	33.022	0.0	60.423
243	18:13:23	44,25615	50,62997	57,40406	18:13:23.0	35.121	0.0	60.429
244	18:13:24	32,11231	4,37429	57,36327	18:13:24.0	35.703	0.0	60.536
245	18:13:25	32,95161	1,804179	57,3731	18:13:25.0	42.661	0.0	60.162
246	18:13:26	35,48148	0	57,36337	18:13:26.0	33.032	0.0	60.153
247	18:13:27	36,65472	2,245177	57,36162	18:13:27.0	33.511	0.0	60.128
248	18:13:28	38,54245	2,352159	57,35784	18:13:28.0	32.754	0.0	60.105
249	18:13:29	37,04464	0,5090442	57,37666	18:13:29.0	37.489	0.0	60.099
250	18:13:30	32,29934	0,4172714	57,37626	18:13:30.0	38.598	0.0	60.116
251	18:13:31	31,78189	1,905484	57,36839	18:13:31.0	34.705	0.0	60.108
252	18:13:32	42,50191	0	57,35468	18:13:32.0	32.944	0.0	60.125
253	18:13:33	40,10337	0	57,39488	18:13:33.0	36.513	0.0	60.112
254	18:13:35	42,83492	0	57,38118	18:13:35.0	39.204	0.0	60.132
255	18:13:36	36,98151	1,023754	57,37575	18:13:36.0	42.436	0.0	60.133
256	18:13:37	35,03097	2,422169	57,36693	18:13:37.0	37.977	0.0	60.151
257	18:13:38	41,72237	0,314568	57,37764	18:13:38.0	38.668	0.0	60.128
258	18:13:39	34,6404	0	57,37896	18:13:39.0	38.583	0.0	60.131
259	18:13:40	33,66499	0,2230105	57,38993	18:13:40.0	34.556	0.0	60.179
260	18:13:41	35,48523	0,06694816	57,38231	18:13:41.0	31.884	0.0	60.164
261	18:13:42	38,01917	0,395325	57,38331	18:13:42.0	37.117	0.0	60.147



262	18:13:43	33,92607	9,454744	57,38881	18:13:43.0	37.278	0.0	60.152
263	18:13:44	38,73767	0	57,38137	18:13:44.0	33.263	0.0	60.142
264	18:13:45	36,45981	0,359744	57,38309	18:13:45.0	38.053	0.0	60.167
265	18:13:46	34,44529	4,698522	57,38883	18:13:46.0	37.145	1.0	60.146
266	18:13:47	33,73104	1,578061	57,36348	18:13:47.0	36.738	0.0	60.138
267	18:13:48	39,96817	5,832745	57,35452	18:13:48.0	33.845	0.0	60.147
268	18:13:49	38,9327	0,3345511	57,38357	18:13:49.0	40.89	0.0	60.129
269	18:13:50	36,59136	0	57,37929	18:13:50.0	35.137	0.0	60.124
270	18:13:51	39,90831	0,9535856	57,37444	18:13:51.0	38.903	0.0	60.151
271	18:13:52	33,92596	0,1308497	57,367	18:13:52.0	38.573	0.0	60.136
272	18:13:53	41,46911	1,409996	57,37209	18:13:53.0	30.832	0.0	60.125
273	18:13:54	32,75644	0,5337946	57,36274	18:13:54.0	43.521	0.0	58.313
274	18:13:55	34,44533	0	57,35913	18:13:55.0	35.578	0.0	58.507
275	18:13:56	33,46986	22,67518	57,37613	18:13:56.0	32.525	0.0	58.738
276	18:13:57	37,23938	0,3310241	57,35373	18:13:57.0	33.561	3.0	58.836
277	18:13:58	41,39042	0	57,37836	18:13:58.0	37.331	0.0	58.881
278	18:13:59	35,8111	0,2908178	57,39995	18:13:59.0	33.416	0.0	58.941
279	18:14:00	35,61597	1,299905	57,38195	18:14:00.0	39.513	0.0	59.002
280	18:14:01	32,36675	0,5814769	57,37214	18:14:01.0	35.265	0.0	59.092
281	18:14:02	35,42087	4,427878	57,39266	18:14:02.0	36.721	0.0	59.108
282	18:14:03	35,22578	4,213686	57,39326	18:14:03.0	35.019	0.0	59.118
283	18:14:04	34,64046	10,69452	57,35789	18:14:04.0	35.0	0.0	59.401
284	18:14:05	32,10416	24,39514	57,29961	18:14:05.0	34.043	0.0	59.81
285	18:14:06	32,56152	7,152216	57,28935	18:14:06.0	29.188	0.0	59.793
286	18:14:07	31,90895	6,108529	57,2606	18:14:07.0	32.8	0.0	59.758
287	18:14:08	33,46975	14,4776	57,24186	18:14:08.0	32.649	0.0	59.739
288	18:14:09	33,53605	19,40987	57,23887	18:14:09.0	34.811	0.0	59.724
289	18:14:10	33,0794	177,3572	57,21165	18:14:10.0	34.814	0.0	59.701
290	18:14:11	36,78664	143,1288	57,14754	18:14:11.0	31.254	0.0	59.686
291	18:14:12	31,58704	5,546529	57,0999	18:14:12.0	33.924	1.0	59.675
292	18:14:13	30,80737	86,24994	57,06903	18:14:13.0	34.54	0.0	59.633
293	18:14:14	32,56179	5,890917	57,08618	18:14:14.0	31.154	2.0	59.61
294	18:14:15	33,1462	10,47305	57,07133	18:14:15.0	31.47	0.0	59.557
295	18:14:17	32,95142	40,25608	57,07504	18:14:17.0	31.934	4.0	59.515
296	18:14:18	31,39219	8,582393	57,07468	18:14:18.0	33.534	0.0	59.502
297	18:14:19	32,4943	13,9908	57,08046	18:14:19.0	31.054	0.0	59.485
298	18:14:20	20,16729	7,140989	57,08749	18:14:20.0	30.026	0.0	59.461
299	18:14:21	17,93631	49,06559	56,94535	18:14:21.0	20.601	0.0	59.461
300	18:14:22	23,32721	5,047553	56,93707	18:14:22.0	17.822	0.0	59.099
301	18:14:23	16,88591	5,77874	56,93877	18:14:23.0	21.031	0.0	59.088
302	18:14:24	19,2291	76,35017	56,93987	18:14:24.0	18.664	2.0	59.082
303	18:14:25	19,81278	13,6431	56,92256	18:14:25.0	17.656	0.0	59.081
304	18:14:26	16,5791	7,599404	56,93141	18:14:26.0	19.912	0.0	59.075
305	18:14:27	16,57894	7,220912	56,92744	18:14:27.0	17.486	0.0	59.069
306	18:14:28	21,95869	13,04519	56,9249	18:14:28.0	15.654	0.0	59.068

307	18:14:29	17,35871	9,264267	56,93456	18:14:29.0	22.712	0.0	59.066
308	18:14:30	20,00746	22,0361	56,94214	18:14:30.0	17.57	0.0	59.066
309	18:14:31	18,13838	4,864893	56,92947	18:14:31.0	20.127	0.0	59.065
310	18:14:32	17,66652	7,568435	56,92959	18:14:32.0	18.229	0.0	59.064
311	18:14:33	20,593	128,8637	56,92746	18:14:33.0	18.084	3.0	59.067
312	18:14:34	17,94346	154,218	56,92746	18:14:34.0	19.87	2.0	59.063
313	18:14:35	18,91797	60,02265	56,95733	18:14:35.0	18.258	1.0	59.063
314	18:14:36	20,67209	20,19127	56,93112	18:14:36.0	18.927	1.0	59.063
315	18:14:37	17,72483	13,44116	56,92834	18:14:37.0	20.29	0.0	59.06
316	18:14:38	20,08743	27,44444	56,92744	18:14:38.0	17.033	1.0	59.059
317	18:14:39	26,90937	5,691657	56,9447	18:14:39.0	19.942	0.0	59.053
318	18:14:40	22,54405	8,994438	56,94018	18:14:40.0	26.672	0.0	59.052
319	18:14:41	23,01106	6,056647	56,93621	18:14:41.0	23.213	0.0	59.052
320	18:14:42	21,37338	60,57458	56,93875	18:14:42.0	23.247	0.0	59.052
321	18:14:43	19,22733	26,34293	56,93562	18:14:43.0	18.75	0.0	59.052
322	18:14:44	20,18995	14,59878	56,93241	18:14:44.0	22.626	0.0	59.051
323	18:14:45	19,84676	85,16095	56,9442	18:14:45.0	19.989	0.0	59.05
324	18:14:46	17,47141	117,9378	56,93246	18:14:46.0	19.452	0.0	59.058
325	18:14:47	20,08735	64,05929	56,94805	18:14:47.0	18.064	2.0	59.054
326	18:14:48	24,97204	57,95947	56,95004	18:14:48.0	19.348	1.0	59.052
327	18:14:49	27,10431	179,0705	56,95183	18:14:49.0	23.065	1.0	59.055
328	18:14:50	21,06201	16,09241	56,93177	18:14:50.0	29.127	0.0	59.095
329	18:14:51	16,69106	38,88348	56,9277	18:14:51.0	20.022	0.0	59.094
330	18:14:52	17,27618	33,0129	56,9091	18:14:52.0	17.924	0.0	59.07
331	18:14:53	19,44632	52,11782	56,93038	18:14:53.0	17.825	2.0	59.068
332	18:14:54	17,47129	49,82539	56,93686	18:14:54.0	18.662	0.0	59.065
333	18:14:55	17,27614	14,46885	56,91732	18:14:55.0	18.151	0.0	59.065
334	18:14:56	17,53013	20,5724	56,92079	18:14:56.0	19.483	0.0	59.063
335	18:14:57	17,27621	9,012276	56,93181	18:14:57.0	17.299	0.0	59.063
336	18:14:58	19,30801	31,49835	56,92947	18:14:58.0	15.593	0.0	59.062
337	18:14:59	20,39787	37,74094	56,94138	18:14:59.0	18.934	0.0	59.061
338	18:15:00	20,04916	22,45033	56,93239	18:15:00.0	21.675	1.0	59.064
339	18:15:01	17,2764	54,84336	56,92433	18:15:01.0	19.093	0.0	59.064
340	18:15:02	18,65308	12,98012	56,92758	18:15:02.0	17.161	1.0	59.063
341	18:15:03	18,32644	12,34031	56,92139	18:15:03.0	19.281	0.0	59.063
342	18:15:04	18,4469	14,01759	56,92684	18:15:04.0	17.98	0.0	59.063
343	18:15:05	18,44694	8,322795	56,93437	18:15:05.0	18.342	0.0	59.063
344	18:15:06	19,22722	10,51007	56,93497	18:15:06.0	19.116	0.0	59.063
345	18:15:07	21,45185	19,92748	56,93365	18:15:07.0	18.376	0.0	59.061
346	18:15:08	21,58686	32,81267	56,93045	18:15:08.0	17.916	0.0	59.06
347	18:15:09	21,37341	32,32776	56,92548	18:15:09.0	24.095	0.0	59.061
348	18:15:10	15,40982	82,98591	56,92399	18:15:10.0	21.342	0.0	59.057
349	18:15:11	17,16376	15,51229	56,94824	18:15:11.0	16.681	2.0	59.057
350	18:15:12	18,642	9,571828	56,95305	18:15:12.0	17.862	1.0	59.056
351	18:15:13	18,93415	16,31231	56,93901	18:15:13.0	19.139	0.0	59.062

352	18:15:14	18,83729	11,17108	56,9245	18:15:14.0	17.211	0.0	59.063
353	18:15:15	26,24156	5,547569	57,18941	18:15:15.0	18.126	0.0	59.061
354	18:15:16	29,63795	4,071625	57,24226	18:15:16.0	20.262	1.0	59.057
355	18:15:17	39,51806	48,58387	57,24559	18:15:17.0	28.527	0.0	59.391
356	18:15:18	37,04448	1,767484	57,24123	18:15:18.0	37.599	0.0	59.394
357	18:15:19	34,12083	2,957742	57,23695	18:15:19.0	40.521	0.0	59.356
358	18:15:20	36,59142	0,1500691	57,23803	18:15:20.0	35.124	0.0	59.381
359	18:15:21	32,17187	9,843505	57,24143	18:15:21.0	30.983	0.0	59.347
360	18:15:22	32,9514	1,979226	57,23561	18:15:22.0	33.006	0.0	59.324
361	18:15:23	31,9771	3,884568	57,24042	18:15:23.0	32.737	0.0	59.311
362	18:15:24	34,31592	0,07448005	57,23569	18:15:24.0	33.073	0.0	59.349
363	18:15:25	36,06987	16,43923	57,2497	18:15:25.0	35.092	0.0	59.334
364	18:15:26	38,93274	1,146402	57,22213	18:15:26.0	38.473	0.0	59.374
365	18:15:27	40,10324	5,307692	57,22227	18:15:27.0	31.662	0.0	59.35
366	18:15:28	32,36662	0,5296032	57,22337	18:15:28.0	36.356	0.0	59.33
367	18:15:29	39,90817	0	57,2414	18:15:29.0	39.742	0.0	59.349
368	18:15:30	31,43284	1,926921	57,25324	18:15:30.0	34.806	0.0	59.336
369	18:15:32	30,54324	0,301177	57,23057	18:15:32.0	33.25	0.0	59.346
370	18:15:33	33,07949	0	57,23062	18:15:33.0	28.629	0.0	59.327
371	18:15:34	40,16305	0,06528996	57,23531	18:15:34.0	32.906	0.0	59.322
372	18:15:35	37,04459	1,712111	57,24131	18:15:35.0	39.598	0.0	59.327
373	18:15:36	51,02919	0,3435208	57,2397	18:15:36.0	39.643	0.0	59.438
374	18:15:37	35,68028	14,91162	57,19525	18:15:37.0	47.684	0.0	59.417
375	18:15:38	36,39638	1,016849	57,24162	18:15:38.0	35.516	0.0	59.395
376	18:15:39	38,01911	4,67437	57,23409	18:15:39.0	37.124	0.0	59.497
377	18:15:40	38,34749	2,620664	57,24348	18:15:40.0	37.334	0.0	59.527
378	18:15:41	37,23933	0,730167	57,26357	18:15:41.0	37.819	0.0	59.533
379	18:15:42	36,0061	2,445458	57,25991	18:15:42.0	37.462	0.0	59.549
380	18:15:43	36,39628	18,55672	57,25003	18:15:43.0	36.358	1.0	59.568
381	18:15:44	32,56174	1,937991	57,26207	18:15:44.0	35.761	0.0	59.56
382	18:15:45	37,17684	0,06161383	57,24934	18:15:45.0	31.679	0.0	59.562
383	18:15:46	38,01908	1,711046	57,25101	18:15:46.0	37.352	0.0	59.577
384	18:15:47	33,926	0	57,24614	18:15:47.0	37.05	0.0	59.559

Elaborado por: Jayron Silva, Anjelo Minango

## MÉTODO MOSTRAR

Tabla 34. Datos ENTITY FRAMEWORK Mostrar

ENTITY FRAMEWORK								
Mostrar								
N°	Código				Jmeter			
	Tiempo	CPU	Disco	Memoria	Tiempo	CPU	Disco	Memoria
1	19:15:33	22,30656	16,22313	57,31516	19:15:33.0	34.25	0.0	57.809
2	19:15:34	22,54392	0,5937138	57,29614	19:15:34.0	20.565	0.0	57.927
3	19:15:35	23,59588	3,898329	57,31915	19:15:35.0	21.202	0.0	58.151

4	19:15:36	24,49502	1,922778	57,35291	19:15:36.0	25.775	0.0	58.357
5	19:15:37	19,77773	22,40301	57,3301	19:15:37.0	22.948	0.0	58.574
6	19:15:38	24,49518	4,123989	57,33508	19:15:38.0	21.29	0.0	58.739
7	19:15:39	21,95872	10,58503	57,30951	19:15:39.0	24.95	0.0	58.842
8	19:15:40	23,59584	0,2338953	57,32613	19:15:40.0	24.33	0.0	60.669
9	19:15:41	26,05592	4,03495	57,35351	19:15:41.0	22.455	0.0	60.859
10	19:15:42	21,95875	2,96284	57,3609	19:15:42.0	23.675	0.0	61.075
11	19:15:43	28,00695	4,222249	57,36231	19:15:43.0	22.421	0.0	61.103
12	19:15:44	23,71465	1,349932	57,33952	19:15:44.0	28.505	0.0	61.382
13	19:15:45	19,61748	3,977403	57,33302	19:15:45.0	23.777	0.0	61.48
14	19:15:46	22,73911	0	57,33842	19:15:46.0	19.707	0.0	61.699
15	19:15:47	23,71475	0	57,32551	19:15:47.0	22.768	0.0	61.904
16	19:15:48	29,79466	8,148462	57,34524	19:15:48.0	25.321	0.0	61.897
17	19:15:49	22,93418	0,3694939	57,37857	19:15:49.0	29.015	0.0	60.813
18	19:15:50	33,73114	0,9335681	57,34067	19:15:50.0	23.315	0.0	60.937
19	19:15:51	23,32455	3,088652	57,3362	19:15:51.0	33.266	0.0	60.922
20	19:15:52	19,50276	0	57,34141	19:15:52.0	24.363	0.0	60.915
21	19:15:53	23,47718	12,2072	57,34249	19:15:53.0	19.552	0.0	60.909
22	19:15:54	24,96021	0,3940165	57,3593	19:15:54.0	22.533	0.0	60.904
23	19:15:55	18,25166	0,07080413	57,35873	19:15:55.0	24.695	0.0	60.909
24	19:15:56	19,50276	8,085546	57,33178	19:15:56.0	19.82	0.0	60.907
25	19:15:57	24,88535	0	57,33931	19:15:57.0	19.048	0.0	60.901
26	19:15:58	21,76359	7,911615	57,34139	19:15:58.0	24.737	0.0	60.898
27	19:15:59	23,71478	4,652482	57,36229	19:15:59.0	22.033	0.0	60.901
28	19:16:00	21,17921	3,278735	57,39402	19:16:00.0	23.701	0.0	60.902
29	19:16:01	24,57017	0	57,3675	19:16:01.0	20.9	0.0	60.967
30	19:16:02	25,23653	4,430478	57,3896	19:16:02.0	24.996	0.0	60.964
31	19:16:03	21,25681	1,451614	57,34119	19:16:03.0	24.94	0.0	60.967
32	19:16:04	19,61761	4,216321	57,3548	19:16:04.0	21.697	0.0	60.955
33	19:16:05	35,4209	0,08154245	57,61621	19:16:05.0	21.349	0.0	60.951
34	19:16:06	38,34754	19,12454	57,56441	19:16:06.0	33.08	0.0	61.413
35	19:16:07	45,62056	1,349792	57,74678	19:16:07.0	38.067	0.0	62.271
36	19:16:08	39,71301	18,02304	58,00653	19:16:08.0	45.331	0.0	61.869
37	19:16:09	37,3718	18,30312	57,69335	19:16:09.0	39.059	0.0	62.22
38	19:16:10	21,56861	45,81784	57,70758	19:16:10.0	38.926	0.0	61.946
39	19:16:11	19,28188	22,9014	57,69149	19:16:11.0	21.344	1.0	61.929
40	19:16:12	24,49502	32,57844	57,67726	19:16:12.0	21.434	0.0	61.827
41	19:16:13	19,81265	19,9174	57,65684	19:16:13.0	23.735	1.0	61.808
42	19:16:14	19,61757	28,88021	57,59631	19:16:14.0	19.71	0.0	61.781
43	19:16:15	24,74726	12,99916	57,56187	19:16:15.0	21.013	0.0	61.764
44	19:16:16	19,30781	20,56471	57,52119	19:16:16.0	23.961	0.0	61.705
45	19:16:17	23,59578	25,64831	57,47578	19:16:17.0	18.333	0.0	61.683
46	19:16:18	24,10477	56,35649	57,17901	19:16:18.0	24.744	0.0	61.664
47	19:16:19	19,50276	23,80945	57,15768	19:16:19.0	22.35	1.0	61.121
48	19:16:20	20,98317	8,57013	57,11791	19:16:20.0	21.322	0.0	61.048

49	19:16:21	19,30817	15,74668	57,12528	19:16:21.0	21.337	0.0	61.011
50	19:16:22	17,66638	10,08873	57,11404	19:16:22.0	20.261	0.0	61.011
51	19:16:24	18,8371	12,504	57,12941	19:16:24.0	18.488	0.0	60.987
52	19:16:25	19,42245	20,56508	57,1298	19:16:25.0	19.708	0.0	60.986
53	19:16:26	18,91798	53,23867	57,111	19:16:26.0	17.097	0.0	60.953
54	19:16:27	15,99428	85,64925	57,11617	19:16:27.0	18.694	1.0	60.941
55	19:16:28	18,7231	100,8073	57,13556	19:16:28.0	18.755	1.0	60.912
56	19:16:29	20,20286	23,5433	57,11198	19:16:29.0	18.811	0.0	60.893
57	19:16:30	21,8416	8,752151	57,12272	19:16:30.0	17.651	0.0	60.89
58	19:16:31	18,64186	7,813407	57,12121	19:16:31.0	22.309	1.0	60.888
59	19:16:32	19,5028	9,401232	57,13472	19:16:32.0	20.851	0.0	60.885
60	19:16:33	22,34886	11,08689	57,13221	19:16:33.0	18.537	0.0	60.884
61	19:16:34	20,39799	9,602558	57,10823	19:16:34.0	20.851	0.0	60.88
62	19:16:35	22,03654	77,43536	57,1138	19:16:35.0	22.256	0.0	60.869
63	19:16:36	17,66654	28,7885	57,11239	19:16:36.0	19.848	0.0	60.869
64	19:16:37	22,81627	14,282	57,13056	19:16:37.0	21.911	0.0	60.857
65	19:16:38	21,37344	24,29086	57,13929	19:16:38.0	21.17	0.0	60.858
66	19:16:39	20,84312	10,40098	57,12009	19:16:39.0	22.12	0.0	60.857
67	19:16:40	17,74854	9,355886	57,10385	19:16:40.0	17.956	0.0	60.857
68	19:16:41	19,30853	96,05057	57,12355	19:16:41.0	16.402	2.0	60.854
69	19:16:42	21,17827	120,3066	57,13769	19:16:42.0	20.072	0.0	60.863
70	19:16:43	20,00773	273,3919	57,16215	19:16:43.0	23.403	4.0	61.005
71	19:16:44	20,08761	151,212	57,15192	19:16:44.0	20.022	2.0	61.018
72	19:16:45	18,90116	110,6747	57,17425	19:16:45.0	19.119	1.0	61.006
73	19:16:46	21,37334	166,6889	57,22306	19:16:46.0	19.41	1.0	61.012
74	19:16:47	19,03217	132,4888	57,21117	19:16:47.0	21.513	2.0	61.069
75	19:16:48	19,89251	127,8123	57,21969	19:16:48.0	19.995	1.0	61.067
76	19:16:49	21,95882	198,0107	57,24403	19:16:49.0	18.902	2.0	61.069
77	19:16:50	17,35861	178,6859	57,24061	19:16:50.0	21.364	2.0	61.134
78	19:16:51	19,8125	116,1868	57,25114	19:16:51.0	19.107	0.0	61.167
79	19:16:52	16,77503	48,18847	57,22419	19:16:52.0	17.377	0.0	61.165
80	19:16:53	20,98315	11,03415	57,23019	19:16:53.0	18.872	0.0	61.156
81	19:16:54	20,20269	39,45892	57,23282	19:16:54.0	18.519	1.0	61.157
82	19:16:55	17,35871	43,75072	57,2448	19:16:55.0	21.594	0.0	61.157
83	19:16:56	18,72335	57,99899	57,26235	19:16:56.0	18.476	0.0	61.181
84	19:16:57	18,1385	50,09995	57,2239	19:16:57.0	16.766	0.0	61.179
85	19:16:58	18,33348	20,62678	57,2146	19:16:58.0	19.563	1.0	61.163
86	19:16:59	19,42213	28,90261	57,22007	19:16:59.0	17.383	0.0	61.159
87	19:17:00	22,34883	6,402679	57,23913	19:17:00.0	20.672	0.0	61.155
88	19:17:01	22,54409	7,43388	57,24989	19:17:01.0	23.261	0.0	61.153
89	19:17:02	17,08822	7,573199	57,24807	19:17:02.0	19.848	0.0	61.157
90	19:17:03	20,20272	14,94414	57,22792	19:17:03.0	18.175	0.0	61.156
91	19:17:04	20,98337	19,73973	57,21684	19:17:04.0	21.045	0.0	61.154
92	19:17:05	20,00765	90,35098	57,21873	19:17:05.0	19.735	0.0	61.15
93	19:17:06	17,66638	24,85985	57,22208	19:17:06.0	19.028	0.0	61.149

94	19:17:07	28,27371	10,30788	57,224	19:17:07.0	17.2	0.0	61.148
95	19:17:08	32,29908	11,09326	57,1766	19:17:08.0	32.726	0.0	61.148
96	19:17:09	19,11283	21,15094	57,17119	19:17:09.0	31.059	0.0	61.069
97	19:17:10	18,83714	51,45021	57,16851	19:17:10.0	16.558	0.0	61.067
98	19:17:11	18,83691	6,08886	57,16626	19:17:11.0	19.317	0.0	61.066
99	19:17:12	21,45189	81,80628	57,15864	19:17:12.0	20.661	2.0	61.064
100	19:17:13	24,10497	48,62685	57,16117	19:17:13.0	21.687	2.0	61.06
101	19:17:14	19,11287	45,30015	57,17229	19:17:14.0	21.778	2.0	61.055
102	19:17:15	18,52813	40,75473	57,18059	19:17:15.0	19.262	0.0	61.056
103	19:17:16	18,25172	14,31641	57,15902	19:17:16.0	18.673	0.0	61.055
104	19:17:17	17,86172	46,99367	57,16277	19:17:17.0	18.394	0.0	61.053
105	19:17:18	20,28237	13,53934	57,15235	19:17:18.0	18.939	0.0	61.051
106	19:17:19	16,77402	19,73312	57,15285	19:17:19.0	19.063	0.0	61.048
107	19:17:20	19,22734	8,161808	57,15287	19:17:20.0	17.936	0.0	61.047
108	19:17:21	20,00762	7,713791	57,15519	19:17:21.0	17.668	0.0	61.046
109	19:17:22	17,08114	86,3445	57,14111	19:17:22.0	20.9	0.0	61.043
110	19:17:23	18,69184	32,54608	57,15591	19:17:23.0	18.094	1.0	61.042
111	19:17:24	20,59306	7,015918	57,14771	19:17:24.0	18.085	0.0	61.042
112	19:17:25	17,31593	26,85832	57,15393	19:17:25.0	21.057	0.0	61.041
113	19:17:26	22,78132	45,29927	57,34438	19:17:26.0	17.187	0.0	61.037
114	19:17:27	23,79076	3,411292	57,44716	19:17:27.0	22.51	0.0	61.258
115	19:17:28	22,81627	0,730546	57,44673	19:17:28.0	24.758	0.0	61.356
116	19:17:29	23,51933	5,529933	57,4479	19:17:29.0	21.209	0.0	61.416
117	19:17:30	17,8551	14,74446	57,4605	19:17:30.0	23.921	0.0	61.404
118	19:17:31	22,15395	0,06725774	57,44969	19:17:31.0	17.893	0.0	61.419
119	19:17:32	21,062	3,243382	57,47559	19:17:32.0	22.546	0.0	61.458
120	19:17:33	20,20283	57,67601	57,4667	19:17:33.0	21.369	0.0	61.445
121	19:17:34	23,90982	11,32327	57,45534	19:17:34.0	20.262	0.0	61.436
122	19:17:35	20,4773	0,2552961	57,4439	19:17:35.0	23.802	0.0	61.475
123	19:17:36	23,90989	0,5158656	57,45522	19:17:36.0	20.221	0.0	61.472
124	19:17:37	21,91956	5,639484	57,45809	19:17:37.0	24.26	0.0	61.461
125	19:17:38	22,15385	16,99851	57,44637	19:17:38.0	22.823	0.0	61.452
126	19:17:39	20,78401	4,089934	57,43736	19:17:39.0	21.487	0.0	61.437
127	19:17:40	22,15385	13,70639	57,4539	19:17:40.0	19.997	0.0	61.447
128	19:17:41	27,03141	1,986539	57,40878	19:17:41.0	24.305	0.0	61.434
129	19:17:42	27,49402	5,847916	57,41787	19:17:42.0	26.375	0.0	61.431
130	19:17:43	27,61665	0,2287748	57,43984	19:17:43.0	27.195	0.0	61.42
131	19:17:44	26,32448	0	57,43647	19:17:44.0	25.157	0.0	61.413
132	19:17:45	27,42152	3,629381	57,42784	19:17:45.0	29.695	0.0	61.423
133	19:17:46	21,06213	2,980849	57,43011	19:17:46.0	27.016	0.0	61.418
134	19:17:47	21,72474	0	57,43819	19:17:47.0	18.325	1.0	61.419
135	19:17:48	21,76364	5,657948	57,42566	19:17:48.0	25.043	0.0	61.42
136	19:17:49	25,08037	2,421604	57,43188	19:17:49.0	23.353	0.0	61.411
137	19:17:50	20,98314	3,884126	57,37934	19:17:50.0	23.783	0.0	61.432
138	19:17:51	23,57279	0	57,37675	19:17:51.0	22.414	0.0	61.432

139	19:17:52	24,10485	0	57,37336	19:17:52.0	23.881	0.0	61.348
140	19:17:53	24,9198	5,859043	57,36657	19:17:53.0	24.575	0.0	61.347
141	19:17:54	21,76355	20,69004	57,37016	19:17:54.0	22.407	0.0	61.333
142	19:17:55	21,84154	0,6967123	57,36188	19:17:55.0	19.506	0.0	61.338
143	19:17:56	25,86084	0,8961779	57,36772	19:17:56.0	26.298	0.0	61.325
144	19:17:57	23,10455	3,768044	57,36501	19:17:57.0	25.143	0.0	61.323
145	19:17:58	19,50275	0	57,36052	19:17:58.0	24.634	0.0	61.325
146	19:17:59	25,73976	39,59274	57,37833	19:17:59.0	19.335	0.0	61.324
147	19:18:01	21,56842	6,318799	57,36226	19:18:01.0	22.277	0.0	61.304
148	19:18:02	24,96378	0,08679254	57,36327	19:18:02.0	23.188	0.0	61.299
149	19:18:03	24,10501	24,37138	57,39555	19:18:03.0	21.09	0.0	61.303
150	19:18:04	19,15982	0	57,37929	19:18:04.0	23.983	0.0	61.329
151	19:18:05	21,37351	5,97745	57,3757	19:18:05.0	23.676	0.0	61.318
152	19:18:06	21,56934	4,097281	57,35631	19:18:06.0	21.603	0.0	61.31
153	19:18:07	23,71471	0,3994112	57,37463	19:18:07.0	19.474	0.0	61.306
154	19:18:08	23,20589	9,171237	57,38231	19:18:08.0	23.942	0.0	61.307
155	19:18:09	23,95679	1,44829	57,42523	19:18:09.0	25.162	0.0	61.31
156	19:18:10	21,95847	26,67859	57,38226	19:18:10.0	23.777	0.0	61.353
157	19:18:11	26,44612	14,16911	57,35392	19:18:11.0	24.503	0.0	61.344
158	19:18:12	24,1807	5,607988	57,33852	19:18:12.0	26.777	0.0	61.312
159	19:18:13	24,49583	4,648186	57,30377	19:18:13.0	25.0	0.0	61.304
160	19:18:14	23,79081	6,551636	57,26414	19:18:14.0	21.526	0.0	61.249
161	19:18:15	26,64119	15,83147	57,25176	19:18:15.0	23.9	0.0	61.239
162	19:18:16	24,88531	16,83047	57,21885	19:18:16.0	23.549	0.0	61.233
163	19:18:17	25,15508	5,308653	57,15718	19:18:17.0	22.664	0.0	61.198
164	19:18:18	21,25858	66,59097	57,13697	19:18:18.0	25.099	0.0	61.151
165	19:18:19	23,59581	74,74892	57,12136	19:18:19.0	25.955	1.0	61.141
166	19:18:20	22,42641	5,702809	57,09185	19:18:20.0	24.119	1.0	61.095
167	19:18:21	25,73978	37,84193	57,04308	19:18:21.0	23.183	0.0	61.067
168	19:18:22	23,5957	6,517366	57,04753	19:18:22.0	26.395	0.0	61.031
169	19:18:23	25,08046	5,524997	57,03402	19:18:23.0	25.893	0.0	61.002
170	19:18:24	24,18065	17,85579	57,03639	19:18:24.0	23.558	1.0	60.969
171	19:18:25	24,5705	46,36904	57,03909	19:18:25.0	26.956	1.0	60.958
172	19:18:26	23,71467	16,19268	57,02888	19:18:26.0	25.393	0.0	60.918
173	19:18:27	27,68907	11,07457	57,04849	19:18:27.0	25.463	0.0	60.893
174	19:18:28	26,05586	79,87044	57,04311	19:18:28.0	25.658	0.0	60.886
175	19:18:29	28,07882	8,690294	57,0433	19:18:29.0	27.092	0.0	60.881
176	19:18:30	29,37253	4,610731	57,03864	19:18:30.0	24.987	0.0	60.883
177	19:18:31	22,34893	6,665829	57,03237	19:18:31.0	25.108	0.0	60.88
178	19:18:32	24,76606	5,552077	57,04536	19:18:32.0	22.878	0.0	60.879
179	19:18:33	30,54338	38,44585	57,05129	19:18:33.0	27.749	0.0	60.877
180	19:18:34	26,64128	15,07957	57,03111	19:18:34.0	31.997	0.0	61.101
181	19:18:35	23,98671	14,28751	57,04086	19:18:35.0	25.204	0.0	61.094
182	19:18:36	23,71464	19,611	57,03735	19:18:36.0	25.855	0.0	61.09
183	19:18:37	20,239	72,23483	57,023	19:18:37.0	22.07	0.0	61.078

184	19:18:38	17,08118	44,25595	57,02127	19:18:38.0	16.753	2.0	61.083
185	19:18:39	17,27608	71,83539	57,04478	19:18:39.0	17.155	1.0	61.084
186	19:18:40	16,7555	8,209978	57,03247	19:18:40.0	18.894	0.0	61.083
187	19:18:41	17,85461	11,21692	57,02814	19:18:41.0	16.833	0.0	61.083
188	19:18:42	18,05672	7,581231	57,03141	19:18:42.0	17.31	0.0	61.082
189	19:18:43	15,52028	14,24592	57,01927	19:18:43.0	17.724	0.0	61.082
190	19:18:44	18,05659	17,80584	57,02457	19:18:44.0	15.06	1.0	61.082
191	19:18:45	17,31133	26,00018	57,02721	19:18:45.0	18.49	0.0	61.082
192	19:18:46	16,69094	65,41515	57,04469	19:18:46.0	16.583	2.0	61.082
193	19:18:47	26,25111	13,3096	57,02338	19:18:47.0	24.649	1.0	61.078
194	19:18:48	23,12908	56,63856	57,02979	19:18:48.0	18.992	0.0	61.077
195	19:18:49	18,92049	8,215235	57,02001	19:18:49.0	22.552	0.0	61.076
196	19:18:50	19,50276	8,594218	57,03364	19:18:50.0	20.532	0.0	61.076
197	19:18:51	23,90977	31,25705	57,02983	19:18:51.0	19.98	0.0	61.076
198	19:18:52	17,86143	28,18965	57,01501	19:18:52.0	22.218	0.0	61.074
199	19:18:53	21,17837	11,1411	57,02489	19:18:53.0	18.572	0.0	61.074
200	19:18:54	17,66652	27,68223	57,02689	19:18:54.0	21.084	0.0	61.076
201	19:18:55	17,12445	61,50412	57,02233	19:18:55.0	16.997	0.0	61.08
202	19:18:56	17,28065	36,29536	57,02544	19:18:56.0	17.758	0.0	61.089
203	19:18:57	17,16392	12,90077	57,03756	19:18:57.0	17.185	1.0	61.095
204	19:18:58	19,42229	9,23916	57,02768	19:18:58.0	17.385	0.0	61.145
205	19:18:59	18,918	33,02078	57,04502	19:18:59.0	19.745	0.0	61.14
206	19:19:00	19,42245	9,734519	57,03572	19:19:00.0	19.439	0.0	61.182
207	19:19:01	17,66648	19,36724	57,02682	19:19:01.0	18.281	0.0	61.176
208	19:19:02	18,90323	19,44562	56,95707	19:19:02.0	17.708	1.0	61.173
209	19:19:03	21,20496	73,58082	56,97546	19:19:03.0	18.735	0.0	61.107
210	19:19:04	16,30462	17,15452	56,98576	19:19:04.0	22.018	0.0	61.11
211	19:19:05	21,56853	48,37757	56,96847	19:19:05.0	16.053	0.0	61.11
212	19:19:06	15,37192	24,47256	56,96976	19:19:06.0	20.715	0.0	61.107
213	19:19:07	16,16248	12,41493	56,96025	19:19:07.0	15.356	0.0	61.104
214	19:19:08	16,49576	14,59304	56,9663	19:19:08.0	15.705	0.0	61.099
215	19:19:09	17,16382	119,6874	56,95549	19:19:09.0	16.943	1.0	61.098
216	19:19:10	16,3386	123,2721	56,95659	19:19:10.0	17.021	3.0	61.098
217	19:19:11	16,886	97,11206	56,95061	19:19:11.0	16.283	2.0	61.098
218	19:19:12	18,83701	64,92782	56,95374	19:19:12.0	16.818	0.0	61.096
219	19:19:13	15,60457	35,98516	56,95336	19:19:13.0	18.835	2.0	61.096
220	19:19:14	17,66639	8,734966	56,96474	19:19:14.0	16.358	0.0	61.095
221	19:19:15	18,83698	20,19016	56,95659	19:19:15.0	17.084	0.0	61.095
222	19:19:16	18,83726	11,32535	56,96202	19:19:16.0	19.164	0.0	61.094
223	19:19:17	16,10666	34,11678	56,96553	19:19:17.0	18.782	0.0	61.095
224	19:19:18	16,96894	18,77133	56,94726	19:19:18.0	15.976	0.0	61.096
225	19:19:19	17,94336	8,506774	56,95927	19:19:19.0	18.37	0.0	61.094
226	19:19:20	15,60463	49,45224	56,95652	19:19:20.0	16.888	0.0	61.088
227	19:19:21	18,72316	51,92459	56,97086	19:19:21.0	16.032	0.0	61.088
228	19:19:22	20,86197	4,718096	57,00439	19:19:22.0	18.443	0.0	61.088



229	19:19:23	22,81618	11,31245	56,98969	19:19:23.0	21.215	0.0	61.123
230	19:19:24	19,6977	8,222946	56,98803	19:19:24.0	21.003	0.0	61.128
231	19:19:25	17,73296	65,61243	56,98323	19:19:25.0	20.865	0.0	61.116
232	19:19:26	30,61242	22,50938	57,17148	19:19:26.0	18.657	0.0	61.112
233	19:19:27	35,29038	6,103549	57,28505	19:19:27.0	28.353	0.0	61.36
234	19:19:28	38,40895	3,546406	57,29992	19:19:28.0	34.261	0.0	61.437
235	19:19:29	35,09546	1,464764	57,26376	19:19:29.0	38.262	0.0	61.533
236	19:19:30	34,51067	27,8897	57,28485	19:19:30.0	32.753	0.0	61.497
237	19:19:31	31,71404	6,515545	57,27976	19:19:31.0	32.552	0.0	61.47
238	19:19:33	34,83565	0,4362811	57,27292	19:19:33.0	35.355	0.0	61.475
239	19:19:34	32,88447	3,643883	57,2724	19:19:34.0	33.122	0.0	61.503
240	19:19:35	39,32294	0,1482109	57,27551	19:19:35.0	39.645	0.0	61.489
241	19:19:36	38,99361	5,051652	57,29832	19:19:36.0	36.647	0.0	61.48
242	19:19:37	32,95142	0,2016422	57,27596	19:19:37.0	33.059	0.0	61.471
243	19:19:38	34,51072	3,559882	57,27505	19:19:38.0	33.2	0.0	61.498
244	19:19:39	31,58712	4,595155	57,28115	19:19:39.0	35.261	0.0	61.474
245	19:19:40	32,17182	2,735824	57,2667	19:19:40.0	31.398	0.0	61.496
246	19:19:41	33,86006	19,32252	57,30956	19:19:41.0	31.194	0.0	61.481
247	19:19:42	35,61589	0,8532254	57,31812	19:19:42.0	37.785	0.0	61.561
248	19:19:43	34,7056	1,116452	57,30152	19:19:43.0	32.9	0.0	61.535
249	19:19:44	36,20125	0	57,29332	19:19:44.0	32.547	0.0	61.522
250	19:19:45	28,98238	0	57,29799	19:19:45.0	31.212	0.0	61.52
251	19:19:46	32,49427	5,753	57,30554	19:19:46.0	34.826	0.0	61.532
252	19:19:47	35,68007	0	57,30404	19:19:47.0	35.38	0.0	61.587
253	19:19:48	45,81528	4,232329	57,30671	19:19:48.0	36.774	0.0	61.593
254	19:19:49	34,70563	0	57,29554	19:19:49.0	40.201	0.0	60.682
255	19:19:50	38,79878	3,841664	57,29858	19:19:50.0	36.261	0.0	60.671
256	19:19:51	32,17182	1,288687	57,28619	19:19:51.0	37.571	0.0	60.688
257	19:19:52	32,17174	0	57,29624	19:19:52.0	31.746	0.0	60.672
258	19:19:53	41,52744	3,83978	57,29459	19:19:53.0	36.448	0.0	60.695
259	19:19:54	41,52729	0,6045285	57,3004	19:19:54.0	42.645	0.0	60.681
260	19:19:55	36,98172	0	57,27983	19:19:55.0	35.5	0.0	60.666
261	19:19:56	36,39636	0,8795864	57,28122	19:19:56.0	37.88	0.0	60.659
262	19:19:57	38,21405	0,08434955	57,27902	19:19:57.0	39.702	0.0	60.667
263	19:19:58	38,93272	0	57,28942	19:19:58.0	34.566	0.0	60.655
264	19:19:59	34,5108	9,843828	57,3269	19:19:59.0	37.673	0.0	60.687
265	19:20:00	36,59149	0	57,31527	19:20:00.0	38.094	0.0	60.714
266	19:20:01	36,39638	0,07475977	57,30657	19:20:01.0	32.831	0.0	60.748
267	19:20:02	33,99174	0,8084676	57,27962	19:20:02.0	32.386	0.0	60.723
268	19:20:03	34,44533	4,433963	57,29179	19:20:03.0	34.276	0.0	60.709
269	19:20:04	36,2013	0,1125292	57,31343	19:20:04.0	37.541	0.0	60.717
270	19:20:05	33,60234	0,07412643	57,3318	19:20:05.0	32.435	0.0	60.702
271	19:20:06	27,68887	0,4684774	57,32319	19:20:06.0	35.593	0.0	60.724
272	19:20:07	37,93856	0,3991077	57,29643	19:20:07.0	31.311	0.0	60.731
273	19:20:08	37,23943	0,2643822	57,30286	19:20:08.0	33.337	0.0	60.719

274	19:20:09	33,92594	1,946002	57,29978	19:20:09.0	36.982	0.0	60.703
275	19:20:10	37,17683	0	57,30069	19:20:10.0	33.218	0.0	60.712
276	19:20:11	37,95719	0	57,32508	19:20:11.0	36.862	0.0	60.7
277	19:20:12	34,44533	0	57,31248	19:20:12.0	37.022	0.0	60.745
278	19:20:13	31,0024	0	57,31087	19:20:13.0	36.491	0.0	60.73
279	19:20:14	34,31579	5,694591	57,30202	19:20:14.0	31.019	0.0	60.717
280	19:20:15	32,88445	13,43669	57,30736	19:20:15.0	33.024	0.0	60.716
281	19:20:16	33,27465	6,525125	57,2646	19:20:16.0	32.018	0.0	60.718
282	19:20:17	34,25018	5,39195	57,23349	19:20:17.0	33.794	0.0	60.706
283	19:20:18	33,27463	7,094988	57,22686	19:20:18.0	33.653	0.0	60.696
284	19:20:19	44,45103	282,1751	57,16619	19:20:19.0	32.822	0.0	60.68
285	19:20:20	29,83665	54,78595	57,15706	19:20:20.0	43.739	2.0	60.664
286	19:20:21	29,76291	5,119554	57,12439	19:20:21.0	28.513	0.0	60.641
287	19:20:22	36,78654	17,05615	57,07508	19:20:22.0	30.644	0.0	60.622
288	19:20:23	31,97687	34,47774	57,04485	19:20:23.0	36.539	0.0	60.522
289	19:20:24	30,73839	6,609027	57,01443	19:20:24.0	31.013	1.0	60.498
290	19:20:25	30,41754	73,77347	56,98258	19:20:25.0	31.969	0.0	60.484
291	19:20:26	28,66346	6,957805	56,97904	19:20:26.0	28.954	0.0	60.43
292	19:20:27	31,71402	6,976122	56,97273	19:20:27.0	29.237	0.0	60.409
293	19:20:28	26,71417	6,226702	56,97235	19:20:28.0	32.334	0.0	60.394
294	19:20:29	26,05612	96,36083	56,97842	19:20:29.0	27.253	0.0	60.378
295	19:20:30	28,66347	15,50277	56,9866	19:20:30.0	24.969	2.0	60.365
296	19:20:31	29,2482	72,53403	56,97512	19:20:31.0	29.446	0.0	60.344
297	19:20:32	21,17847	88,64951	56,97727	19:20:32.0	28.933	1.0	60.335
298	19:20:33	17,47124	10,66327	56,97345	19:20:33.0	21.992	0.0	60.332
299	19:20:34	16,57936	23,36081	56,97584	19:20:34.0	18.439	0.0	60.325
300	19:20:35	16,69097	53,9515	56,97689	19:20:35.0	17.289	0.0	60.325
301	19:20:36	18,8041	11,32167	57,00028	19:20:36.0	17.414	0.0	60.324
302	19:20:38	18,94757	4,395826	57,00047	19:20:38.0	17.918	0.0	60.324
303	19:20:39	15,52025	46,30237	56,99363	19:20:39.0	16.974	1.0	60.324
304	19:20:40	17,04355	18,13713	56,98239	19:20:40.0	16.948	0.0	60.324
305	19:20:41	16,70929	18,03585	56,97402	19:20:41.0	17.816	0.0	60.324
306	19:20:42	16,8861	87,17378	56,99229	19:20:42.0	16.511	0.0	60.323
307	19:20:43	17,55371	22,15557	56,98158	19:20:43.0	18.069	0.0	60.323
308	19:20:44	20,20276	86,93696	56,98746	19:20:44.0	18.53	0.0	60.324
309	19:20:45	22,3489	12,17238	56,96952	19:20:45.0	19.111	0.0	60.323
310	19:20:46	17,66646	14,35852	56,96926	19:20:46.0	21.831	0.0	60.323
311	19:20:47	19,28299	18,42003	56,97785	19:20:47.0	19.922	3.0	60.319
312	19:20:48	17,66654	9,319962	57,0075	19:20:48.0	17.152	0.0	60.319
313	19:20:49	18,64199	7,183391	56,99863	19:20:49.0	18.564	1.0	60.32
314	19:20:50	15,79941	52,39251	56,98801	19:20:50.0	16.554	1.0	60.319
315	19:20:51	18,44706	5,75687	56,98036	19:20:51.0	17.517	0.0	60.317
316	19:20:52	18,83694	6,29213	56,97809	19:20:52.0	17.175	1.0	60.317
317	19:20:53	15,91069	88,15518	56,98378	19:20:53.0	18.052	2.0	60.316
318	19:20:54	22,81608	7,582275	56,98794	19:20:54.0	21.504	0.0	60.317

319	19:20:55	18,83698	18,2483	56,99268	19:20:55.0	17.195	0.0	60.317
320	19:20:56	19,13635	6,984464	56,9904	19:20:56.0	18.874	0.0	60.318
321	19:20:57	18,05663	109,5612	56,9805	19:20:57.0	20.838	2.0	60.317
322	19:20:58	19,2272	12,96001	56,98421	19:20:58.0	16.211	0.0	60.317
323	19:20:59	21,25698	162,9387	57,00346	19:20:59.0	19.609	0.0	60.318
324	19:21:00	24,57039	5,139377	57,0042	19:21:00.0	27.177	0.0	60.327
325	19:21:01	24,29987	13,08034	56,98368	19:21:01.0	25.444	0.0	60.326
326	19:21:02	23,59665	66,92017	56,99382	19:21:02.0	22.905	3.0	60.326
327	19:21:03	22,73911	40,72282	56,986	19:21:03.0	17.299	0.0	60.326
328	19:21:04	24,57051	9,408034	56,98462	19:21:04.0	25.399	0.0	60.325
329	19:21:05	21,40632	8,737264	56,99447	19:21:05.0	25.527	0.0	60.326
330	19:21:06	19,11296	29,31946	57,00915	19:21:06.0	19.327	0.0	60.329
331	19:21:07	22,7392	28,9302	56,99884	19:21:07.0	22.878	0.0	60.327
332	19:21:08	21,64249	6,272223	56,98579	19:21:08.0	22.546	0.0	60.331
333	19:21:09	17,16385	22,39932	56,99176	19:21:09.0	18.537	1.0	60.33
334	19:21:10	18,57677	16,83734	56,98717	19:21:10.0	18.156	0.0	60.33
335	19:21:11	17,66649	51,26562	57,00389	19:21:11.0	18.193	0.0	60.33
336	19:21:12	16,96889	31,81332	57,01721	19:21:12.0	16.48	0.0	60.33
337	19:21:13	19,81255	21,78031	56,99564	19:21:13.0	19.174	0.0	60.336
338	19:21:14	20,00769	11,51423	57,00863	19:21:14.0	20.331	0.0	60.336
339	19:21:15	17,66647	13,41964	56,99942	19:21:15.0	18.293	0.0	60.338
340	19:21:16	18,25124	6,756445	57,00265	19:21:16.0	16.825	0.0	60.338
341	19:21:17	16,3843	31,22295	57,00389	19:21:17.0	18.136	0.0	60.336
342	19:21:18	20,20279	42,01318	56,99289	19:21:18.0	16.812	0.0	60.338
343	19:21:19	18,05676	47,76895	57,01441	19:21:19.0	18.899	1.0	60.338
344	19:21:20	19,42238	57,56602	57,01492	19:21:20.0	21.178	0.0	60.352
345	19:21:21	16,49587	17,26249	56,99263	19:21:21.0	17.5	0.0	60.352
346	19:21:22	21,56845	16,33633	57,00021	19:21:22.0	17.01	0.0	60.348
347	19:21:23	17,75514	6,058612	56,991	19:21:23.0	21.329	0.0	60.347
348	19:21:24	20,67352	14,18119	56,98878	19:21:24.0	20.447	0.0	60.343
349	19:21:25	22,15383	20,19418	57,00896	19:21:25.0	19.672	0.0	60.339
350	19:21:26	24,88524	35,59397	57,19898	19:21:26.0	21.665	0.0	60.348
351	19:21:27	32,49437	12,2479	57,30829	19:21:27.0	25.339	0.0	60.589
352	19:21:28	36,39642	0	57,30832	19:21:28.0	33.518	0.0	60.729
353	19:21:29	33,73117	26,83435	57,28734	19:21:29.0	36.126	0.0	60.753
354	19:21:30	32,49455	17,10526	57,29628	19:21:30.0	34.488	0.0	60.778
355	19:21:31	37,17677	0	57,31441	19:21:31.0	31.855	0.0	60.751
356	19:21:32	36,26477	5,867751	57,30401	19:21:32.0	35.54	0.0	60.74
357	19:21:33	38,08105	6,154183	57,29734	19:21:33.0	36.89	0.0	60.783
358	19:21:34	39,57832	3,452266	57,30606	19:21:34.0	38.023	0.0	60.765
359	19:21:35	34,51064	7,864651	57,29636	19:21:35.0	37.967	0.0	60.795
360	19:21:36	37,95712	1,537302	57,31133	19:21:36.0	34.308	0.0	60.785
361	19:21:37	32,68953	1,27489	57,29488	19:21:37.0	37.794	0.0	60.767
362	19:21:38	36,45505	0	57,29887	19:21:38.0	32.441	0.0	60.795
363	19:21:39	37,37202	0,07401043	57,29425	19:21:39.0	35.974	0.0	60.78

364	19:21:40	36,7692	20,939	57,30709	19:21:40.0	36.787	0.0	60.78
365	19:21:41	33,34127	3,693376	57,30554	19:21:41.0	35.773	0.0	60.812
366	19:21:42	32,68934	0,06808702	57,29021	19:21:42.0	33.288	0.0	60.797
367	19:21:43	31,97679	0	57,31405	19:21:43.0	31.851	0.0	60.774
368	19:21:44	34,57596	9,190912	57,30963	19:21:44.0	33.378	0.0	60.763
369	19:21:45	37,62943	0,82881	57,2894	19:21:45.0	35.483	0.0	60.783
370	19:21:46	38,40889	0,2068487	57,29253	19:21:46.0	36.282	0.0	60.781
371	19:21:47	34,64057	0	57,27364	19:21:47.0	38.128	0.0	60.766
372	19:21:48	40,10332	4,84746	57,28588	19:21:48.0	33.628	0.0	60.752
373	19:21:49	33,92599	4,692815	57,31518	19:21:49.0	39.206	0.0	60.754
374	19:21:50	31,27649	2,653501	57,29016	19:21:50.0	34.87	0.0	60.759
375	19:21:51	33,07977	0	57,30817	19:21:51.0	32.405	0.0	60.805
376	19:21:52	34,51065	4,210496	57,27551	19:21:52.0	33.631	0.0	60.813
377	19:21:53	38,77497	0,6992979	57,27689	19:21:53.0	34.462	0.0	60.785
378	19:21:54	36,00615	5,254503	57,28414	19:21:54.0	36.809	0.0	60.781
379	19:21:55	37,2394	0	57,29703	19:21:55.0	32.244	0.0	60.767
380	19:21:56	31,00237	4,702475	57,27854	19:21:56.0	38.56	0.0	60.759
381	19:21:57	37,95727	0	57,26809	19:21:57.0	33.663	0.0	60.765
382	19:21:58	37,04448	0	57,28519	19:21:58.0	35.869	0.0	60.75
383	19:22:00	35,68023	6,850641	57,29327	19:22:00.0	37.086	0.0	60.781
384	19:22:01	36,98164	2,681484	57,29069	19:22:01.0	33.988	0.0	60.762

**Elaborado por:** Jayron Silva, Anjelo Minango

## MÉTODO ACTUALIZAR

**Tabla 35.** Datos ENTITY FRAMEWORK Actualizar

ENTITY FRAMEWORK								
Actualizar								
N°	Código				Jmeter			
	Tiempo	CPU	Disco	Memoria	Tiempo	CPU	Disco	Memoria
1	17:47:21	26,14182	5,69945	57,639	17:47:21.0	33.084	1.0	61.606
2	17:47:22	26,32456	3,703075	57,60093	17:47:22.0	26.724	0.0	61.66
3	17:47:23	23,51952	3,656549	57,5812	17:47:23.0	24.119	0.0	61.709
4	17:47:24	16,84934	0,5489137	57,58354	17:47:24.0	23.228	0.0	61.683
5	17:47:25	23,32448	5,16195	57,57166	17:47:25.0	21.836	0.0	61.71
6	17:47:26	23,01115	2,644983	57,58481	17:47:26.0	20.428	0.0	61.698
7	17:47:27	36,07002	1,700283	57,68742	17:47:27.0	23.593	0.0	61.674
8	17:47:28	21,84162	0,5605585	57,55826	17:47:28.0	35.921	0.0	61.729
9	17:47:29	23,71521	3,742817	57,57448	17:47:29.0	20.777	0.0	61.717
10	17:47:30	25,27518	7,201852	57,5724	17:47:30.0	24.131	0.0	61.704
11	17:47:31	22,62131	3,231293	57,59798	17:47:31.0	24.341	0.0	61.686
12	17:47:32	18,64209	3,33218	57,57089	17:47:32.0	22.755	0.0	61.682
13	17:47:33	22,03657	5,304317	57,58024	17:47:33.0	18.737	0.0	61.691
14	17:47:34	22,2316	3,31113	57,57433	17:47:34.0	21.974	0.0	61.679

15	17:47:35	25,34996	1,503665	57,5569	17:47:35.0	22.023	0.0	61.68
16	17:47:36	26,32459	7,286044	57,56448	17:47:36.0	25.59	0.0	61.679
17	17:47:37	21,25697	4,349786	57,58435	17:47:37.0	26.263	0.0	61.675
18	17:47:38	20,86142	0,06599395	57,57816	17:47:38.0	21.444	0.0	61.675
19	17:47:39	21,06218	2,492879	57,56599	17:47:39.0	20.845	0.0	61.674
20	17:47:40	18,83774	0	57,55828	17:47:40.0	21.267	0.0	61.679
21	17:47:41	21,95884	4,600128	57,5436	17:47:41.0	18.702	0.0	61.68
22	17:47:42	23,73084	0	57,63622	17:47:42.0	21.742	0.0	61.668
23	17:47:43	42,2495	0,6307029	58,17113	17:47:43.0	23.849	0.0	61.701
24	17:47:44	44,8409	12,51419	57,84843	17:47:44.0	42.465	0.0	62.804
25	17:47:45	36,6547	3,413417	58,10917	17:47:45.0	43.362	0.0	62.321
26	17:47:46	37,04461	7,817637	57,95322	17:47:46.0	37.373	0.0	63.252
27	17:47:47	18,91807	0	57,95782	17:47:47.0	39.494	1.0	62.588
28	17:47:48	21,2086	16,30351	57,9543	17:47:48.0	17.723	0.0	62.583
29	17:47:49	19,42244	9,118551	57,95574	17:47:49.0	19.806	0.0	62.506
30	17:47:50	21,06203	0	57,95968	17:47:50.0	21.714	0.0	62.44
31	17:47:51	22,34884	17,53345	57,94359	17:47:51.0	20.439	0.0	62.449
32	17:47:52	23,32436	1,853334	57,94182	17:47:52.0	21.396	0.0	62.44
33	17:47:53	20,64616	10,25895	57,94873	17:47:53.0	22.559	0.0	62.439
34	17:47:54	25,07289	9,335838	57,93902	17:47:54.0	22.935	0.0	62.436
35	17:47:56	27,81172	3,45269	57,6478	17:47:56.0	18.932	1.0	61.958
36	17:47:57	18,70781	0	57,66095	17:47:57.0	26.946	0.0	61.895
37	17:47:58	19,42241	5,221077	57,65557	17:47:58.0	21.96	0.0	61.891
38	17:47:59	20,08742	14,96738	57,64184	17:47:59.0	17.961	0.0	61.876
39	17:48:00	24,20507	64,70628	57,55719	17:48:00.0	24.99	1.0	61.867
40	17:48:01	21,76377	135,7964	57,5442	17:48:01.0	21.09	1.0	61.829
41	17:48:02	22,42637	114,3774	57,49563	17:48:02.0	21.884	1.0	61.782
42	17:48:03	18,64187	89,42127	57,48762	17:48:03.0	17.527	0.0	61.759
43	17:48:04	18,4469	87,63801	57,44245	17:48:04.0	19.527	1.0	61.756
44	17:48:05	18,83703	49,42836	57,39565	17:48:05.0	19.914	0.0	61.698
45	17:48:06	21,17834	41,56268	57,34777	17:48:06.0	22.247	1.0	61.689
46	17:48:07	21,01494	5,832675	57,34569	17:48:07.0	21.011	0.0	61.61
47	17:48:08	20,39783	41,3527	57,32544	17:48:08.0	21.5	0.0	61.594
48	17:48:09	26,12957	61,57395	57,27352	17:48:09.0	21.505	0.0	61.59
49	17:48:10	21,0621	42,79969	57,27421	17:48:10.0	22.523	2.0	61.584
50	17:48:11	23,20591	9,549663	57,27845	17:48:11.0	22.816	1.0	61.574
51	17:48:12	18,72309	6,932371	57,27285	17:48:12.0	22.485	0.0	61.562
52	17:48:13	16,96891	49,64802	57,26852	17:48:13.0	18.17	2.0	61.543
53	17:48:14	18,73946	75,94662	57,28414	17:48:14.0	18.531	2.0	61.512
54	17:48:15	18,72306	47,26741	57,27452	17:48:15.0	17.832	2.0	61.489
55	17:48:16	15,96157	33,4722	57,26125	17:48:16.0	16.988	1.0	61.474
56	17:48:17	18,33324	26,88822	57,26697	17:48:17.0	16.589	1.0	61.466
57	17:48:18	18,8371	56,44747	57,27319	17:48:18.0	18.287	2.0	61.464
58	17:48:19	19,61742	8,122942	57,28024	17:48:19.0	19.252	0.0	61.461
59	17:48:20	20,593	14,72081	57,28316	17:48:20.0	17.221	0.0	61.461

60	17:48:21	14,54499	65,55939	57,29009	17:48:21.0	19.808	1.0	61.457
61	17:48:22	17,3587	37,87743	57,27273	17:48:22.0	16.902	0.0	61.444
62	17:48:23	17,90864	7,393116	57,26965	17:48:23.0	15.844	0.0	61.431
63	17:48:24	16,69114	83,88795	57,275	17:48:24.0	17.251	1.0	61.423
64	17:48:25	17,94347	23,39004	57,28545	17:48:25.0	18.694	0.0	61.414
65	17:48:26	19,61751	61,27931	57,27866	17:48:26.0	18.206	1.0	61.411
66	17:48:27	18,83502	90,92435	57,27854	17:48:27.0	19.124	3.0	61.401
67	17:48:28	19,088	43,3091	57,2865	17:48:28.0	18.97	0.0	61.401
68	17:48:29	16,38419	20,37369	57,2744	17:48:29.0	19.439	0.0	61.401
69	17:48:30	17,62282	13,03004	57,236	17:48:30.0	17.714	0.0	61.398
70	17:48:31	17,2763	7,499719	57,23306	17:48:31.0	16.833	0.0	61.381
71	17:48:32	15,02	37,15948	57,2415	17:48:32.0	16.677	1.0	61.376
72	17:48:33	17,55371	6,907312	57,25642	17:48:33.0	15.604	1.0	61.375
73	17:48:34	19,61744	47,54522	57,2327	17:48:34.0	16.762	0.0	61.375
74	17:48:35	17,08383	76,73481	57,21613	17:48:35.0	19.296	0.0	61.371
75	17:48:36	20,2028	36,46646	57,2641	17:48:36.0	16.884	0.0	61.356
76	17:48:37	17,84373	20,83179	57,2266	17:48:37.0	20.425	0.0	61.358
77	17:48:38	21,17918	52,15042	57,24886	17:48:38.0	18.152	0.0	61.357
78	17:48:39	16,88594	19,16888	57,25697	17:48:39.0	20.459	0.0	61.357
79	17:48:40	17,08297	69,38921	57,23616	17:48:40.0	18.185	0.0	61.358
80	17:48:41	19,66299	39,443	57,226	17:48:41.0	17.067	0.0	61.356
81	17:48:42	16,96895	42,17883	57,23564	17:48:42.0	19.325	0.0	61.353
82	17:48:43	14,93501	25,45181	57,22839	17:48:43.0	16.825	1.0	61.352
83	17:48:44	18,83719	79,10156	57,23005	17:48:44.0	14.811	2.0	61.352
84	17:48:45	18,05669	33,14927	57,2579	17:48:45.0	18.851	0.0	61.351
85	17:48:46	16,30089	27,09253	57,24815	17:48:46.0	16.8	0.0	61.35
86	17:48:47	18,25498	7,393277	57,24461	17:48:47.0	17.597	1.0	61.352
87	17:48:48	16,90326	12,45975	57,23509	17:48:48.0	17.974	0.0	61.352
88	17:48:49	20,7882	23,52944	57,15799	17:48:49.0	16.114	0.0	61.351
89	17:48:50	21,17834	34,42735	57,1632	17:48:50.0	20.532	0.0	61.335
90	17:48:51	16,07919	7,738739	57,17935	17:48:51.0	21.087	1.0	61.329
91	17:48:52	18,26504	74,90978	57,17533	17:48:52.0	16.764	0.0	61.328
92	17:48:53	18,13833	34,3429	57,17148	17:48:53.0	17.841	1.0	61.329
93	17:48:54	19,11297	42,38923	57,14766	17:48:54.0	17.019	1.0	61.325
94	17:48:55	19,85227	54,6672	57,14355	17:48:55.0	20.0	0.0	61.322
95	17:48:56	16,38412	20,68208	57,1535	17:48:56.0	19.355	0.0	61.32
96	17:48:57	18,13843	11,88594	57,15582	17:48:57.0	16.972	0.0	61.318
97	17:48:58	16,49587	8,715107	57,15397	17:48:58.0	18.271	0.0	61.317
98	17:48:59	16,69083	73,33315	57,16198	17:48:59.0	17.375	0.0	61.316
99	17:49:00	18,918	9,328655	57,16093	17:49:00.0	16.585	0.0	61.312
100	17:49:01	17,94317	32,24997	57,15522	17:49:01.0	18.369	0.0	61.31
101	17:49:03	15,91055	47,97407	57,15685	17:49:03.0	17.737	0.0	61.303
102	17:49:04	18,05656	8,955234	57,16643	17:49:04.0	18.473	0.0	61.303
103	17:49:05	19,03326	22,13407	57,17853	17:49:05.0	17.754	0.0	61.304
104	17:49:06	18,64193	21,5816	57,15811	17:49:06.0	19.506	0.0	61.306

105	17:49:07	18,64202	9,430906	57,14735	17:49:07.0	17.743	0.0	61.304
106	17:49:08	16,88599	23,56571	57,16304	17:49:08.0	18.801	0.0	61.303
107	17:49:09	18,08507	18,89009	57,16113	17:49:09.0	17.766	1.0	61.303
108	17:49:10	20,59297	40,49499	57,18568	17:49:10.0	17.206	0.0	61.303
109	17:49:11	16,69114	50,39926	57,17344	17:49:11.0	18.384	2.0	61.357
110	17:49:12	16,32695	120,5742	57,16246	17:49:12.0	17.867	1.0	61.333
111	17:49:13	21,64669	54,83837	57,16823	17:49:13.0	16.383	0.0	61.333
112	17:49:14	17,27628	31,12821	57,16251	17:49:14.0	20.059	1.0	61.334
113	17:49:15	18,25161	17,32386	57,16701	17:49:15.0	18.904	0.0	61.332
114	17:49:16	22,74539	30,13392	57,17129	17:49:16.0	22.002	0.0	61.331
115	17:49:17	24,2561	27,93428	57,37164	17:49:17.0	21.411	1.0	61.331
116	17:49:18	26,90928	27,3612	57,35495	17:49:18.0	24.37	0.0	61.539
117	17:49:19	20,20288	0,3171594	57,46148	17:49:19.0	26.655	0.0	61.702
118	17:49:20	22,15379	1,95787	57,45474	17:49:20.0	20.821	0.0	61.719
119	17:49:21	20,59308	13,98636	57,46584	17:49:21.0	22.45	0.0	61.676
120	17:49:22	24,9378	3,985802	57,47322	17:49:22.0	24.731	0.0	61.714
121	17:49:23	21,76374	0	57,4563	17:49:23.0	18.151	0.0	61.693
122	17:49:24	20,98326	1,958008	57,48666	17:49:24.0	19.643	0.0	61.668
123	17:49:25	20,78822	0,9826044	57,47892	17:49:25.0	23.925	0.0	61.708
124	17:49:26	19,0323	0,4982347	57,48006	17:49:26.0	18.172	0.0	61.705
125	17:49:27	19,81263	0,8416268	57,46976	17:49:27.0	20.789	0.0	61.709
126	17:49:28	17,55354	4,880367	57,47882	17:49:28.0	19.555	0.0	61.705
127	17:49:29	19,61752	3,123268	57,4935	17:49:29.0	20.461	0.0	61.727
128	17:49:30	22,54409	3,106106	57,47306	17:49:30.0	21.662	0.0	61.738
129	17:49:31	22,66838	0	57,48219	17:49:31.0	17.552	0.0	61.728
130	17:49:32	18,86845	0	57,4874	17:49:32.0	22.826	0.0	61.724
131	17:49:33	20,78817	0,905358	57,47126	17:49:33.0	19.514	0.0	61.723
132	17:49:34	21,062	1,830258	57,45565	17:49:34.0	20.271	0.0	61.717
133	17:49:35	23,59699	1,59484	57,52615	17:49:35.0	24.186	0.0	61.713
134	17:49:36	20,98321	0,3582856	57,47184	17:49:36.0	22.944	0.0	61.732
135	17:49:37	18,28935	0	57,48102	17:49:37.0	21.887	0.0	61.723
136	17:49:38	22,57569	1,417196	57,47698	17:49:38.0	20.5	0.0	61.719
137	17:49:39	21,25687	0,5660528	57,46091	17:49:39.0	17.948	0.0	61.716
138	17:49:40	22,2316	0,6823372	57,47846	17:49:40.0	21.188	0.0	61.714
139	17:49:41	21,45184	0,8058346	57,48169	17:49:41.0	22.161	0.0	61.714
140	17:49:42	21,58093	0,4083373	57,47107	17:49:42.0	21.508	0.0	61.709
141	17:49:43	22,15393	0	57,47667	17:49:43.0	22.456	0.0	61.71
142	17:49:44	19,69767	1,388732	57,47612	17:49:44.0	21.153	0.0	61.709
143	17:49:45	17,55353	0,364655	57,45756	17:49:45.0	21.264	0.0	61.71
144	17:49:46	23,12926	0,3323438	57,48138	17:49:46.0	18.682	0.0	61.705
145	17:49:47	21,25694	0,8983349	57,49372	17:49:47.0	20.142	0.0	61.706
146	17:49:48	19,89248	0,3724586	57,49183	17:49:48.0	22.374	0.0	61.772
147	17:49:49	22,11272	1,370653	57,48827	17:49:49.0	20.329	0.0	61.762
148	17:49:50	22,50359	0,1989805	57,47131	17:49:50.0	20.993	0.0	61.75
149	17:49:51	21,84139	0	57,46033	17:49:51.0	24.31	0.0	61.736

150	17:49:52	21,45194	0,4694965	57,46148	17:49:52.0	20.864	0.0	61.734
151	17:49:53	17,47127	0,5130001	57,48391	17:49:53.0	20.674	0.0	61.724
152	17:49:54	21,06203	0	57,46935	17:49:54.0	19.343	0.0	61.723
153	17:49:55	18,52822	2,05027	57,46254	17:49:55.0	19.443	0.0	61.734
154	17:49:56	23,48811	0,06771521	57,45455	17:49:56.0	19.216	0.0	61.737
155	17:49:57	22,1732	0,1748189	57,44592	17:49:57.0	22.723	0.0	61.722
156	17:49:58	23,51961	5,99811	57,4528	17:49:58.0	22.687	0.0	61.717
157	17:49:59	18,05685	17,30894	57,44319	17:49:59.0	23.166	0.0	61.71
158	17:50:00	19,8928	54,45206	57,40024	17:50:00.0	19.127	0.0	61.715
159	17:50:01	20,00775	13,8137	57,36678	17:50:01.0	19.698	1.0	61.691
160	17:50:02	16,10559	7,911676	57,36057	17:50:02.0	19.12	0.0	61.675
161	17:50:03	17,66639	9,596403	57,33075	17:50:03.0	17.725	0.0	61.669
162	17:50:04	19,03221	7,416601	57,30843	17:50:04.0	17.783	0.0	61.598
163	17:50:05	21,95869	32,42357	57,27732	17:50:05.0	18.914	0.0	61.592
164	17:50:06	21,06206	38,44919	57,24788	17:50:06.0	21.225	1.0	61.588
165	17:50:07	20,57293	82,45202	57,20883	17:50:07.0	21.864	0.0	61.536
166	17:50:08	19,50279	18,9133	57,16765	17:50:08.0	21.3	0.0	61.529
167	17:50:09	17,94331	36,74288	57,18683	17:50:09.0	19.437	0.0	61.452
168	17:50:10	17,08116	29,84341	57,18877	17:50:10.0	16.766	1.0	61.447
169	17:50:11	19,30864	16,18577	57,17122	17:50:11.0	18.912	0.0	61.441
170	17:50:12	16,38413	8,562255	57,172	17:50:12.0	19.71	0.0	61.433
171	17:50:13	19,11294	20,16112	57,16639	17:50:13.0	13.943	0.0	61.433
172	17:50:14	19,87666	7,950686	57,17165	17:50:14.0	20.014	0.0	61.425
173	17:50:15	16,5791	85,29601	57,17016	17:50:15.0	19.206	0.0	61.403
174	17:50:17	17,66528	98,33829	57,16669	17:50:17.0	18.223	1.0	61.366
175	17:50:18	19,49946	47,07968	57,18322	17:50:18.0	17.716	0.0	61.352
176	17:50:19	16,30077	17,0226	57,16182	17:50:19.0	17.165	0.0	61.336
177	17:50:20	22,81627	8,113648	57,17796	17:50:20.0	23.241	0.0	61.328
178	17:50:21	27,22645	8,794113	57,16598	17:50:21.0	26.836	0.0	61.321
179	17:50:22	25,73976	7,863954	57,16701	17:50:22.0	25.367	0.0	61.315
180	17:50:23	22,5441	6,614529	57,16904	17:50:23.0	21.03	0.0	61.316
181	17:50:24	21,95884	6,914052	57,18829	17:50:24.0	20.86	0.0	61.315
182	17:50:25	19,22747	49,2061	57,18083	17:50:25.0	23.381	0.0	61.316
183	17:50:26	23,40082	43,20162	57,17048	17:50:26.0	18.317	1.0	61.316
184	17:50:27	19,39807	8,879185	57,18714	17:50:27.0	21.894	0.0	61.315
185	17:50:28	16,38423	12,78727	57,18334	17:50:28.0	19.806	0.0	61.313
186	17:50:29	21,45112	52,25742	57,18083	17:50:29.0	19.288	0.0	61.312
187	17:50:30	16,88601	99,68529	57,18274	17:50:30.0	18.702	2.0	61.311
188	17:50:31	17,66652	108,8681	57,17461	17:50:31.0	15.262	1.0	61.308
189	17:50:32	15,40958	12,5491	57,17432	17:50:32.0	18.624	0.0	61.308
190	17:50:33	17,52978	15,20421	57,17495	17:50:33.0	16.427	1.0	61.308
191	17:50:34	18,80682	65,19869	57,17753	17:50:34.0	17.716	0.0	61.308
192	17:50:35	20,00782	39,16371	57,17327	17:50:35.0	17.713	0.0	61.307
193	17:50:36	20,00781	34,05335	57,17339	17:50:36.0	21.0	0.0	61.306
194	17:50:37	20,40889	22,48738	57,17444	17:50:37.0	19.093	0.0	61.305



195	17:50:38	18,72316	28,75949	57,17255	17:50:38.0	22.977	1.0	61.308
196	17:50:39	18,65626	34,88175	57,16713	17:50:39.0	15.906	0.0	61.308
197	17:50:40	19,5027	8,695267	57,16816	17:50:40.0	18.446	0.0	61.307
198	17:50:41	16,49597	12,22058	57,17387	17:50:41.0	18.554	0.0	61.306
199	17:50:42	20,39789	20,72317	57,17667	17:50:42.0	20.152	0.0	61.307
200	17:50:43	20,47727	77,25863	57,17487	17:50:43.0	16.337	2.0	61.307
201	17:50:44	18,83726	9,17184	57,1787	17:50:44.0	21.274	0.0	61.304
202	17:50:45	20,86703	21,61404	57,19475	17:50:45.0	20.325	0.0	61.305
203	17:50:46	18,52822	52,77107	57,18915	17:50:46.0	19.478	0.0	61.305
204	17:50:47	18,83723	121,0151	57,18686	17:50:47.0	18.51	1.0	61.305
205	17:50:48	17,11213	54,41904	57,18169	17:50:48.0	19.924	1.0	61.305
206	17:50:49	20,98337	23,64218	57,17918	17:50:49.0	18.7	0.0	61.305
207	17:50:50	16,5791	8,175399	57,18927	17:50:50.0	19.275	1.0	61.289
208	17:50:51	16,96886	10,89306	57,17413	17:50:51.0	16.612	0.0	61.289
209	17:50:52	15,52034	41,78837	57,17432	17:50:52.0	17.187	2.0	61.288
210	17:50:53	17,95785	46,70783	57,1731	17:50:53.0	15.345	0.0	61.289
211	17:50:54	16,88603	35,58811	57,18834	17:50:54.0	17.975	0.0	61.288
212	17:50:55	17,94355	8,660914	57,1864	17:50:55.0	16.693	0.0	61.288
213	17:50:56	18,72301	15,09365	57,17904	17:50:56.0	19.184	0.0	61.285
214	17:50:57	18,0781	24,44693	57,16887	17:50:57.0	18.092	0.0	61.285
215	17:50:58	16,69097	5,720181	57,16462	17:50:58.0	17.936	0.0	61.285
216	17:50:59	19,69748	18,93097	57,18839	17:50:59.0	16.558	2.0	61.285
217	17:51:00	18,44681	33,83211	57,23224	17:51:00.0	19.547	0.0	61.291
218	17:51:01	16,18965	39,47754	57,21098	17:51:01.0	18.523	1.0	61.382
219	17:51:02	15,60466	46,06752	57,20716	17:51:02.0	16.18	2.0	61.359
220	17:51:03	16,1057	83,09621	57,18956	17:51:03.0	15.237	0.0	61.356
221	17:51:04	17,16376	12,86118	57,18779	17:51:04.0	16.911	0.0	61.34
222	17:51:05	21,74366	10,92542	57,21947	17:51:05.0	16.804	0.0	61.337
223	17:51:06	17,67854	8,965734	57,17628	17:51:06.0	20.853	0.0	61.336
224	17:51:07	17,27634	90,52525	57,16784	17:51:07.0	19.139	0.0	61.331
225	17:51:08	16,1057	46,82288	57,16741	17:51:08.0	15.581	0.0	61.323
226	17:51:09	16,69107	67,1944	57,16519	17:51:09.0	18.146	0.0	61.322
227	17:51:10	16,10003	30,41197	57,1871	17:51:10.0	15.837	1.0	61.32
228	17:51:11	18,33323	14,39912	57,17327	17:51:11.0	16.233	2.0	61.32
229	17:51:12	16,10559	10,9489	57,17992	17:51:12.0	17.261	0.0	61.315
230	17:51:13	14,82496	11,19421	57,17992	17:51:13.0	16.622	0.0	61.314
231	17:51:14	20,98334	8,138396	57,17454	17:51:14.0	15.949	1.0	61.315
232	17:51:15	17,87835	22,61069	57,1753	17:51:15.0	21.382	0.0	61.314
233	17:51:16	15,13214	49,85431	57,1771	17:51:16.0	17.687	0.0	61.314
234	17:51:17	26,05596	22,83717	57,49056	17:51:17.0	15.467	1.0	61.314
235	17:51:19	25,27553	3,878966	57,45027	17:51:19.0	30.504	0.0	61.657
236	17:51:20	31,32359	25,7239	57,43948	17:51:20.0	27.448	0.0	61.641
237	17:51:21	27,8838	10,96698	57,45617	17:51:21.0	25.384	0.0	61.627
238	17:51:22	25,87514	1,781473	57,44257	17:51:22.0	24.569	0.0	61.663
239	17:51:23	26,70617	0	57,42827	17:51:23.0	24.7	0.0	61.64

240	17:51:24	21,06278	0,5707418	57,43539	17:51:24.0	27.352	0.0	61.651
241	17:51:25	18,83873	2,135525	57,44912	17:51:25.0	23.356	0.0	61.62
242	17:51:26	26,51951	3,637929	57,43962	17:51:26.0	26.303	0.0	61.634
243	17:51:27	26,25112	0,3407039	57,4309	17:51:27.0	22.912	0.0	61.654
244	17:51:28	23,79069	0	57,43826	17:51:28.0	20.579	0.0	61.648
245	17:51:29	26,90928	0,2544169	57,42597	17:51:29.0	25.339	0.0	61.646
246	17:51:30	24,29999	9,732165	57,42624	17:51:30.0	26.855	0.0	61.646
247	17:51:31	21,14067	0	57,44953	17:51:31.0	26.306	0.0	61.637
248	17:51:32	19,61757	0,5357746	57,44986	17:51:32.0	19.821	0.0	61.641
249	17:51:33	18,8371	0,08228169	57,43334	17:51:33.0	20.252	0.0	61.637
250	17:51:34	20,86704	4,285944	57,43224	17:51:34.0	22.34	0.0	61.647
251	17:51:35	20,98321	3,967264	57,43762	17:51:35.0	15.172	0.0	61.636
252	17:51:36	21,95875	3,936016	57,42848	17:51:36.0	22.596	0.0	61.631
253	17:51:37	25,155	0	57,44649	17:51:37.0	22.966	0.0	61.634
254	17:51:38	21,64669	0,3541697	57,45146	17:51:38.0	23.983	0.0	61.663
255	17:51:39	17,08519	0	57,41813	17:51:39.0	22.474	0.0	61.657
256	17:51:40	21,95878	0,4568495	57,4336	17:51:40.0	19.11	0.0	61.656
257	17:51:41	17,35883	3,454507	57,4226	17:51:41.0	21.465	0.0	61.654
258	17:51:42	22,21013	0,2531849	57,44314	17:51:42.0	19.69	0.0	61.645
259	17:51:43	23,12952	0,1738331	57,45082	17:51:43.0	18.97	0.0	61.643
260	17:51:44	20,0077	3,482384	57,42698	17:51:44.0	22.72	0.0	61.64
261	17:51:45	20,39799	1,243375	57,4402	17:51:45.0	19.319	0.0	61.646
262	17:51:46	24,29998	9,026903	57,4457	17:51:46.0	21.422	0.0	61.641
263	17:51:47	21,95881	2,469887	57,42547	17:51:47.0	25.66	0.0	61.642
264	17:51:48	20,28242	0,4146452	57,43185	17:51:48.0	22.994	0.0	61.646
265	17:51:49	18,3334	3,006288	57,46084	17:51:49.0	19.997	0.0	61.642
266	17:51:50	22,73925	3,551525	57,45584	17:51:50.0	18.73	0.0	61.646
267	17:51:51	23,98557	0	57,44656	17:51:51.0	20.744	0.0	61.654
268	17:51:52	20,1895	7,954194	57,43384	17:51:52.0	22.991	0.0	61.648
269	17:51:53	19,89056	0,26377	57,43719	17:51:53.0	21.008	0.0	61.641
270	17:51:54	21,84142	0	57,42817	17:51:54.0	20.234	0.0	61.637
271	17:51:55	19,61749	0	57,45529	17:51:55.0	21.055	0.0	61.64
272	17:51:56	21,42691	44,95625	57,45089	17:51:56.0	21.887	0.0	61.66
273	17:51:57	20,08739	2,445539	57,44584	17:51:57.0	19.599	0.0	61.666
274	17:51:58	22,42645	3,449384	57,41918	17:51:58.0	20.312	0.0	61.658
275	17:51:59	20,39795	15,08595	57,38979	17:51:59.0	22.169	0.0	61.653
276	17:52:00	18,72316	7,450965	57,3746	17:52:00.0	20.329	0.0	61.639
277	17:52:01	27,03141	5,421234	57,34674	17:52:01.0	19.119	1.0	61.602
278	17:52:02	24,96044	250,0356	57,33211	17:52:02.0	27.004	0.0	61.596
279	17:52:03	21,64674	43,30443	57,31334	17:52:03.0	25.152	3.0	61.191
280	17:52:04	18,90774	169,7259	57,2845	17:52:04.0	20.012	4.0	61.127
281	17:52:05	20,98313	6,174981	57,241	17:52:05.0	21.32	0.0	61.077
282	17:52:06	23,71911	8,455885	57,20455	17:52:06.0	19.861	0.0	61.061
283	17:52:07	20,0874	24,61961	57,18253	17:52:07.0	24.389	0.0	60.997
284	17:52:08	18,64194	16,56438	57,14558	17:52:08.0	20.064	0.0	60.985

285	17:52:09	20,98324	4,744918	57,1105	17:52:09.0	18.876	0.0	60.935
286	17:52:11	19,49236	25,97769	57,11464	17:52:11.0	18.033	0.0	60.908
287	17:52:12	17,94356	25,76477	57,11609	17:52:12.0	18.734	0.0	60.905
288	17:52:13	19,63683	61,3461	57,12473	17:52:13.0	18.849	2.0	60.898
289	17:52:14	22,15388	23,26739	57,14807	17:52:14.0	19.234	0.0	60.898
290	17:52:15	16,18919	7,803091	57,14551	17:52:15.0	20.991	0.0	60.872
291	17:52:16	19,076	36,20832	57,12413	17:52:16.0	18.562	1.0	60.845
292	17:52:17	21,16446	55,80357	57,12544	17:52:17.0	18.754	1.0	60.844
293	17:52:18	16,30076	45,18488	57,12248	17:52:18.0	18.693	0.0	60.817
294	17:52:19	21,25533	19,44728	57,12779	17:52:19.0	20.915	0.0	60.801
295	17:52:20	22,23136	5,207855	57,12544	17:52:20.0	23.165	0.0	60.795
296	17:52:21	22,23562	19,1196	57,10736	17:52:21.0	19.459	0.0	60.796
297	17:52:22	17,68441	32,38128	57,13314	17:52:22.0	18.912	0.0	60.79
298	17:52:23	17,47127	38,30223	57,11062	17:52:23.0	19.288	0.0	60.786
299	17:52:24	18,918	7,50124	57,1215	17:52:24.0	18.512	0.0	60.783
300	17:52:25	21,25678	12,4135	57,1154	17:52:25.0	16.395	0.0	60.782
301	17:52:26	21,3734	10,18342	57,13388	17:52:26.0	21.653	1.0	60.778
302	17:52:27	16,96895	8,272801	57,12571	17:52:27.0	21.856	0.0	60.775
303	17:52:28	19,42225	75,31841	57,11258	17:52:28.0	18.123	1.0	60.775
304	17:52:29	17,9435	99,97152	57,11473	17:52:29.0	17.775	2.0	60.775
305	17:52:30	20,25579	28,74145	57,13197	17:52:30.0	18.822	0.0	60.771
306	17:52:31	16,72416	69,87803	57,1155	17:52:31.0	18.628	2.0	60.771
307	17:52:32	23,90954	16,2638	57,14709	17:52:32.0	19.248	2.0	60.771
308	17:52:33	24,69028	18,58977	57,15835	17:52:33.0	24.723	0.0	60.772
309	17:52:34	24,15177	6,644488	57,13365	17:52:34.0	22.128	1.0	60.776
310	17:52:35	34,64051	12,58539	57,13212	17:52:35.0	25.573	0.0	60.777
311	17:52:36	19,69761	6,508403	57,1331	17:52:36.0	35.02	0.0	60.777
312	17:52:37	27,22914	9,601042	57,12093	17:52:37.0	25.444	0.0	60.778
313	17:52:38	19,89261	8,458208	57,15522	17:52:38.0	23.218	0.0	60.779
314	17:52:39	17,47138	25,91299	57,14938	17:52:39.0	18.71	0.0	60.782
315	17:52:40	16,91905	102,5285	57,12219	17:52:40.0	17.051	0.0	60.784
316	17:52:41	16,18921	106,0518	57,12848	17:52:41.0	17.905	1.0	60.776
317	17:52:42	19,81252	68,90077	57,13099	17:52:42.0	15.166	2.0	60.776
318	17:52:43	18,83967	44,42442	57,13405	17:52:43.0	19.488	1.0	60.779
319	17:52:44	18,1385	25,45762	57,14675	17:52:44.0	19.104	0.0	60.776
320	17:52:45	18,1384	8,837417	57,13412	17:52:45.0	17.326	0.0	60.773
321	17:52:46	20,47392	6,397454	57,15943	17:52:46.0	17.764	0.0	60.773
322	17:52:47	18,83704	32,9449	57,13113	17:52:47.0	20.5	1.0	60.779
323	17:52:48	17,45287	33,22278	57,12004	17:52:48.0	18.849	0.0	60.776
324	17:52:49	16,4958	63,13268	57,13056	17:52:49.0	17.496	2.0	60.776
325	17:52:50	19,59819	34,14135	57,12167	17:52:50.0	16.612	1.0	60.776
326	17:52:51	19,61755	11,50653	57,13126	17:52:51.0	19.872	0.0	60.776
327	17:52:52	19,30774	17,80985	57,13972	17:52:52.0	19.327	0.0	60.776
328	17:52:53	16,34788	20,10431	57,13812	17:52:53.0	19.218	1.0	60.777
329	17:52:54	19,22735	47,97058	57,12757	17:52:54.0	16.517	0.0	60.78

330	17:52:55	18,67859	18,03706	57,12834	17:52:55.0	19.563	0.0	60.779
331	17:52:56	14,74001	28,60485	57,12554	17:52:56.0	16.652	0.0	60.779
332	17:52:57	16,88613	36,39351	57,13099	17:52:57.0	16.658	0.0	60.776
333	17:52:58	19,69751	30,22656	57,13415	17:52:58.0	16.735	0.0	60.776
334	17:52:59	25,08028	87,55688	57,133	17:52:59.0	18.301	0.0	60.776
335	17:53:00	17,94362	36,07222	57,13262	17:53:00.0	24.073	2.0	60.789
336	17:53:01	17,27617	10,74134	57,1286	17:53:01.0	20.354	0.0	60.783
337	17:53:02	20,9906	49,197	57,17459	17:53:02.0	17.882	1.0	60.782
338	17:53:04	18,72306	17,49356	57,17325	17:53:04.0	17.56	0.0	60.819
339	17:53:05	18,64209	12,14736	57,15154	17:53:05.0	20.155	0.0	60.813
340	17:53:06	19,03218	26,2192	57,159	17:53:06.0	18.486	0.0	60.809
341	17:53:07	18,64376	51,89557	57,14979	17:53:07.0	19.486	0.0	60.795
342	17:53:08	16,77402	149,131	57,12953	17:53:08.0	17.367	2.0	60.794
343	17:53:09	17,47147	35,48304	57,13757	17:53:09.0	18.595	0.0	60.792
344	17:53:10	18,2518	22,67811	57,12862	17:53:10.0	18.068	0.0	60.792
345	17:53:11	18,91813	17,56415	57,13649	17:53:11.0	18.185	0.0	60.788
346	17:53:12	15,60457	8,698346	57,13047	17:53:12.0	17.737	0.0	60.788
347	17:53:13	20,98319	14,66625	57,13594	17:53:13.0	20.246	0.0	60.787
348	17:53:14	16,68571	14,64826	57,13448	17:53:14.0	15.812	0.0	60.787
349	17:53:15	15,0199	15,00483	57,13793	17:53:15.0	17.081	0.0	60.787
350	17:53:16	17,89341	47,17103	57,14257	17:53:16.0	16.07	0.0	60.787
351	17:53:17	23,90981	55,29288	57,34615	17:53:17.0	17.221	1.0	60.788
352	17:53:18	19,50283	6,206694	57,44041	17:53:18.0	24.747	0.0	61.027
353	17:53:19	22,15397	8,226599	57,44238	17:53:19.0	19.368	0.0	61.108
354	17:53:20	20,64894	2,103399	57,4528	17:53:20.0	22.579	0.0	61.167
355	17:53:21	23,98573	9,495543	57,45505	17:53:21.0	21.534	0.0	61.227
356	17:53:22	21,37348	6,732542	57,47337	17:53:22.0	23.196	0.0	61.229
357	17:53:23	17,49213	6,087066	57,45457	17:53:23.0	22.234	1.0	61.259
358	17:53:24	22,23158	0,3084204	57,44307	17:53:24.0	17.332	0.0	61.24
359	17:53:25	22,73947	2,770706	57,44776	17:53:25.0	22.398	0.0	61.238
360	17:53:26	23,79066	0,972336	57,46533	17:53:26.0	23.422	0.0	61.247
361	17:53:27	22,42639	2,631047	57,4838	17:53:27.0	23.287	0.0	61.243
362	17:53:28	21,25694	0	57,47239	17:53:28.0	24.064	0.0	61.314
363	17:53:29	18,52809	1,14595	57,46414	17:53:29.0	20.279	0.0	61.304
364	17:53:30	21,95878	6,552576	57,46007	17:53:30.0	19.808	0.0	61.3
365	17:53:31	19,11298	0,8360727	57,44936	17:53:31.0	21.852	0.0	61.299
366	17:53:32	24,37548	0	57,45132	17:53:32.0	18.945	0.0	61.29
367	17:53:33	33,92602	0,301716	57,47313	17:53:33.0	25.727	0.0	61.287
368	17:53:34	21,37353	2,301637	57,4573	17:53:34.0	31.557	0.0	61.287
369	17:53:36	24,76524	3,846994	57,45175	17:53:36.0	24.557	0.0	61.267
370	17:53:37	22,34895	0	57,47588	17:53:37.0	19.372	0.0	61.266
371	17:53:38	19,89257	0	57,46208	17:53:38.0	22.301	0.0	61.272
372	17:53:39	30,15301	0,9958025	57,45928	17:53:39.0	26.671	0.0	61.264
373	17:53:40	24,88524	0	57,45905	17:53:40.0	26.279	0.0	61.263
374	17:53:41	21,91947	3,831594	57,45804	17:53:41.0	26.952	0.0	61.265

375	17:53:42	23,20612	0,5996453	57,4523	17:53:42.0	21.466	0.0	61.261
376	17:53:43	21,56842	0,9246892	57,4517	17:53:43.0	22.392	0.0	61.26
377	17:53:44	18,64196	0	57,47138	17:53:44.0	21.846	0.0	61.273
378	17:53:45	19,6977	17,88357	57,4627	17:53:45.0	17.939	0.0	61.276
379	17:53:46	21,56848	0,605161	57,48817	17:53:46.0	19.557	0.0	61.278
380	17:53:47	24,76532	0,1652475	57,48731	17:53:47.0	20.559	0.0	61.313
381	17:53:48	17,94337	6,647913	57,46813	17:53:48.0	24.167	0.0	61.31
382	17:53:49	23,70992	0	57,47543	17:53:49.0	25.09	0.0	61.306
383	17:53:50	24,30014	5,512603	57,46514	17:53:50.0	22.523	0.0	61.306
384	17:53:51	20,39792	2,363673	57,47002	17:53:51.0	22.814	0.0	61.302

**Elaborado por:** Jayron Silva, Anjelo Minango

## MÉTODO ELIMINAR

**Tabla 36.** Datos ENTITY FRAMEWORK Eliminar

ENTITY FRAMEWORK								
Eliminar								
N°	Código				Jmeter			
	Tiempo	CPU	Disco	Memoria	Tiempo	CPU	Disco	Memoria
1	19:41:49	24,43782	0,3433452	57,87239	19:41:49.0	3.322	0.0	60.777
2	19:41:50	25,47043	11,52746	57,84487	19:41:50.0	29.958	0.0	61.098
3	19:41:51	19,6977	3,756543	57,82354	19:41:51.0	24.667	0.0	60.978
4	19:41:52	22,34923	0	57,83583	19:41:52.0	26.113	0.0	61.007
5	19:41:53	20,67224	3,823844	57,84475	19:41:53.0	16.919	0.0	60.995
6	19:41:54	27,1042	4,282485	57,81921	19:41:54.0	20.44	0.0	61.0
7	19:41:55	27,03152	9,879267	57,819	19:41:55.0	27.872	0.0	61.038
8	19:41:56	25,01892	0,2024193	57,84451	19:41:56.0	22.64	0.0	61.047
9	19:41:57	21,17925	7,005491	57,85441	19:41:57.0	25.174	0.0	61.05
10	19:41:58	21,25694	1,525069	57,85774	19:41:58.0	25.381	0.0	61.077
11	19:41:59	30,15302	1,581884	57,8442	19:41:59.0	22.767	0.0	61.124
12	19:42:01	26,32453	99,44473	57,82129	19:42:01.0	23.159	7.0	61.211
13	19:42:02	22,15393	1,194517	57,80821	19:42:02.0	26.792	0.0	61.197
14	19:42:03	27,10428	4,038236	57,81261	19:42:03.0	28.305	0.0	61.21
15	19:42:04	29,37271	0	57,87099	19:42:04.0	22.811	0.0	61.295
16	19:42:05	30,09753	9,861568	57,88141	19:42:05.0	28.284	0.0	61.417
17	19:42:06	24,86546	1,973014	57,85472	19:42:06.0	31.506	1.0	61.416
18	19:42:07	21,06204	4,003007	57,81847	19:42:07.0	24.33	0.0	61.436
19	19:42:08	24,69007	8,929682	57,83894	19:42:08.0	20.782	0.0	61.423
20	19:42:09	27,61673	8,237281	57,87015	19:42:09.0	24.025	1.0	61.912
21	19:42:10	23,3255	0,5667441	57,88263	19:42:10.0	27.63	0.0	61.448
22	19:42:11	37,17679	9,767927	57,8695	19:42:11.0	24.357	0.0	61.468
23	19:42:12	23,12941	0,1162052	57,85922	19:42:12.0	37.217	0.0	61.549
24	19:42:13	20,0436	0	57,85312	19:42:13.0	23.352	0.0	61.522
25	19:42:14	21,25697	6,855359	57,83172	19:42:14.0	19.517	0.0	61.514
26	19:42:15	25,54499	7,473646	57,85231	19:42:15.0	22.472	1.0	61.491

27	19:42:16	25,34991	1,690848	57,85078	19:42:16.0	25.19	0.0	61.481
28	19:42:17	23,71473	0	57,84626	19:42:17.0	25.184	0.0	61.475
29	19:42:18	24,18045	0,365094	57,83213	19:42:18.0	23.577	0.0	61.478
30	19:42:19	24,88526	0,7447211	57,83385	19:42:19.0	23.711	0.0	61.477
31	19:42:20	22,5441	0,3144224	57,8409	19:42:20.0	24.557	0.0	61.47
32	19:42:21	21,95885	0	57,84949	19:42:21.0	22.62	0.0	61.468
33	19:42:22	24,18053	3,787046	57,88079	19:42:22.0	22.03	0.0	61.467
34	19:42:23	18,85555	0,4720859	57,88574	19:42:23.0	23.919	0.0	61.492
35	19:42:24	23,79081	2,887414	57,86761	19:42:24.0	20.054	0.0	61.49
36	19:42:25	22,73919	0,06768734	57,85508	19:42:25.0	25.08	0.0	61.492
37	19:42:26	19,03229	0,3679048	57,85334	19:42:26.0	22.294	0.0	61.485
38	19:42:27	39,18863	0,9271071	58,47515	19:42:27.0	18.323	0.0	61.484
39	19:42:28	43,22488	30,1114	58,09494	19:42:28.0	37.687	0.0	62.317
40	19:42:29	37,17674	7,472087	58,6442	19:42:29.0	40.291	0.0	62.404
41	19:42:30	42,69681	11,21361	58,3144	19:42:30.0	40.559	0.0	63.134
42	19:42:31	37,56688	144,0855	58,55899	19:42:31.0	39.129	1.0	62.595
43	19:42:32	37,43445	17,48987	58,32576	19:42:32.0	40.281	4.0	63.699
44	19:42:33	21,8417	15,98832	58,30949	19:42:33.0	41.421	0.0	62.803
45	19:42:34	19,22714	7,164945	58,28843	19:42:34.0	22.855	2.0	62.702
46	19:42:35	22,34892	19,47322	58,23967	19:42:35.0	18.955	0.0	62.701
47	19:42:36	24,17793	24,16671	58,21193	19:42:36.0	22.384	3.0	62.672
48	19:42:37	19,50288	92,73699	58,18258	19:42:37.0	21.067	0.0	62.637
49	19:42:38	20,6721	58,73095	58,16407	19:42:38.0	22.276	0.0	62.554
50	19:42:39	19,89243	15,723	58,19849	19:42:39.0	20.5	0.0	62.537
51	19:42:40	23,18921	14,3269	58,17689	19:42:40.0	20.405	0.0	62.479
52	19:42:41	23,98567	13,25528	57,71318	19:42:41.0	23.52	0.0	62.475
53	19:42:42	16,38416	30,32243	57,70473	19:42:42.0	23.623	0.0	61.667
54	19:42:43	20,87158	9,25216	57,69806	19:42:43.0	18.122	1.0	61.645
55	19:42:44	21,25688	10,57867	57,70522	19:42:44.0	19.319	0.0	61.639
56	19:42:45	30,61258	65,82591	57,88335	19:42:45.0	19.663	0.0	61.63
57	19:42:46	38,40885	100,7455	58,14243	19:42:46.0	22.562	0.0	61.626
58	19:42:47	37,04453	60,99954	58,05261	19:42:47.0	41.132	1.0	62.545
59	19:42:48	37,17685	73,96341	58,40089	19:42:48.0	33.928	0.0	62.554
60	19:42:49	32,91936	34,10752	58,07423	19:42:49.0	40.074	2.0	63.32
61	19:42:50	18,05669	7,821486	58,08585	19:42:50.0	43.023	0.0	62.419
62	19:42:51	21,77333	54,38979	58,08879	19:42:51.0	16.733	0.0	62.389
63	19:42:52	21,06201	42,40537	58,08733	19:42:52.0	22.453	0.0	62.386
64	19:42:53	20,4773	139,3386	58,08117	19:42:53.0	19.42	0.0	62.381
65	19:42:54	18,33329	41,58183	58,0858	19:42:54.0	19.848	4.0	62.377
66	19:42:55	25,3193	59,86502	58,08195	19:42:55.0	21.24	0.0	62.326
67	19:42:56	18,83707	38,95057	58,07899	19:42:56.0	21.754	0.0	62.287
68	19:42:57	22,9343	22,115	58,09561	19:42:57.0	20.592	1.0	62.263
69	19:42:58	23,90969	8,082755	57,81758	19:42:58.0	23.86	0.0	62.247
70	19:42:59	21,76278	45,16957	57,83736	19:42:59.0	22.598	0.0	61.72
71	19:43:00	21,17834	140,1678	57,819	19:43:00.0	22.013	0.0	61.714

72	19:43:01	18,2794	90,8926	57,79429	19:43:01.0	18.328	1.0	61.714
73	19:43:02	19,81261	6,771653	57,78987	19:43:02.0	22.298	1.0	61.71
74	19:43:03	21,45185	8,402896	57,79898	19:43:03.0	19.564	0.0	61.69
75	19:43:04	18,91797	50,35738	57,79972	19:43:04.0	16.822	0.0	61.689
76	19:43:05	17,3588	30,96246	57,79778	19:43:05.0	21.05	0.0	61.688
77	19:43:06	21,64663	8,935864	57,79293	19:43:06.0	20.845	1.0	61.684
78	19:43:07	22,5441	14,93818	57,77583	19:43:07.0	21.252	0.0	61.682
79	19:43:08	24,58063	8,608747	57,78423	19:43:08.0	19.56	0.0	61.672
80	19:43:09	28,78728	70,09071	57,77586	19:43:09.0	24.037	0.0	61.668
81	19:43:10	24,69012	22,24834	57,79427	19:43:10.0	23.027	0.0	61.659
82	19:43:11	21,37348	22,65741	57,79559	19:43:11.0	27.513	0.0	61.659
83	19:43:12	18,15209	44,78938	57,78229	19:43:12.0	24.752	0.0	61.659
84	19:43:13	20,5931	106,3905	57,77237	19:43:13.0	21.723	2.0	61.655
85	19:43:15	20,77408	64,017	57,79107	19:43:15.0	22.414	2.0	61.652
86	19:43:16	20,98307	37,72992	57,80386	19:43:16.0	18.962	2.0	61.652
87	19:43:17	17,27624	11,99257	57,804	19:43:17.0	22.065	0.0	61.66
88	19:43:18	21,25685	10,95808	57,78989	19:43:18.0	18.307	0.0	61.66
89	19:43:19	21,37343	35,30486	57,78638	19:43:19.0	19.121	0.0	61.658
90	19:43:20	19,42737	8,046509	57,77987	19:43:20.0	21.78	1.0	61.656
91	19:43:21	19,69748	9,837377	57,78709	19:43:21.0	19.147	0.0	61.653
92	19:43:22	22,15382	72,31882	57,77636	19:43:22.0	21.734	2.0	61.649
93	19:43:23	15,94837	47,66728	57,77571	19:43:23.0	19.727	0.0	61.635
94	19:43:24	17,47145	9,700573	57,78054	19:43:24.0	16.42	0.0	61.642
95	19:43:25	20,98738	17,54498	57,77346	19:43:25.0	17.61	0.0	61.642
96	19:43:26	18,252	16,53791	57,77449	19:43:26.0	21.58	0.0	61.64
97	19:43:27	21,06197	20,69226	57,77026	19:43:27.0	17.607	0.0	61.638
98	19:43:28	22,03651	9,28752	57,76304	19:43:28.0	22.891	0.0	61.636
99	19:43:29	16,9688	25,86934	57,79131	19:43:29.0	21.392	0.0	61.632
100	19:43:30	17,55364	35,12099	57,78069	19:43:30.0	16.391	0.0	61.631
101	19:43:31	15,71539	83,45517	57,76725	19:43:31.0	17.552	0.0	61.631
102	19:43:32	18,0583	15,65625	57,77036	19:43:32.0	15.487	0.0	61.631
103	19:43:33	18,05659	39,25917	57,76942	19:43:33.0	17.895	0.0	61.629
104	19:43:34	17,35871	12,28816	57,7557	19:43:34.0	17.04	1.0	61.628
105	19:43:35	18,25183	17,0575	57,78552	19:43:35.0	18.694	0.0	61.622
106	19:43:36	19,69768	116,0916	57,7704	19:43:36.0	18.75	1.0	61.623
107	19:43:37	18,64165	130,4152	57,77289	19:43:37.0	19.685	1.0	61.622
108	19:43:38	26,64123	212,0338	57,74324	19:43:38.0	19.339	1.0	61.622
109	19:43:39	16,57907	221,8693	57,7451	19:43:39.0	25.393	6.0	61.604
110	19:43:40	16,8863	36,17282	57,75349	19:43:40.0	18.058	1.0	61.599
111	19:43:41	16,50041	11,95156	57,75218	19:43:41.0	17.775	0.0	61.599
112	19:43:42	21,56849	21,36424	57,74606	19:43:42.0	16.977	0.0	61.599
113	19:43:43	17,35255	9,660216	57,75173	19:43:43.0	21.756	0.0	61.599
114	19:43:44	18,11599	8,398119	57,74022	19:43:44.0	17.575	0.0	61.598
115	19:43:45	18,25173	27,9097	57,7464	19:43:45.0	18.152	0.0	61.597
116	19:43:46	28,41787	10,52691	58,06744	19:43:46.0	17.365	0.0	61.597

117	19:43:47	21,76367	6,903409	58,08062	19:43:47.0	25.765	0.0	61.822
118	19:43:48	22,03651	1,171413	58,09449	19:43:48.0	22.931	0.0	61.999
119	19:43:49	23,20605	57,06565	58,09016	19:43:49.0	19.904	0.0	62.048
120	19:43:50	25,9346	1,699926	58,09016	19:43:50.0	26.805	1.0	61.773
121	19:43:51	22,8163	1,946673	58,08088	19:43:51.0	24.41	0.0	61.81
122	19:43:52	26,83624	4,260173	58,07325	19:43:52.0	25.678	0.0	61.832
123	19:43:53	26,44621	2,385547	58,09465	19:43:53.0	27.336	0.0	61.815
124	19:43:54	24,49497	1,105685	58,1067	19:43:54.0	25.572	0.0	61.846
125	19:43:55	32,29908	0	58,08879	19:43:55.0	24.321	0.0	61.876
126	19:43:56	27,81178	3,171839	58,07693	19:43:56.0	25.85	0.0	61.865
127	19:43:57	22,34887	1,704133	58,07012	19:43:57.0	28.181	0.0	61.859
128	19:43:58	27,88388	7,441751	58,09336	19:43:58.0	25.843	0.0	61.836
129	19:43:59	30,93358	0,265305	58,11412	19:43:59.0	29.717	0.0	61.852
130	19:44:00	24,69011	0	58,07256	19:44:00.0	29.471	0.0	61.872
131	19:44:01	25,27524	1,423897	58,08245	19:44:01.0	26.678	0.0	61.875
132	19:44:02	26,90926	0,2192745	58,08844	19:44:02.0	27.12	0.0	61.849
133	19:44:03	27,29916	29,92211	58,09255	19:44:03.0	23.104	0.0	61.843
134	19:44:04	24,49509	4,918772	58,1002	19:44:04.0	23.739	0.0	61.846
135	19:44:05	23,18634	3,807874	58,10453	19:44:05.0	24.446	0.0	61.856
136	19:44:06	22,93423	0,9186246	58,12612	19:44:06.0	29.784	0.0	61.848
137	19:44:07	25,08055	0,07290161	58,09501	19:44:07.0	24.838	0.0	61.867
138	19:44:08	25,11723	4,207333	58,09458	19:44:08.0	24.759	0.0	61.871
139	19:44:09	32,65968	1,434885	58,09998	19:44:09.0	25.19	1.0	61.868
140	19:44:10	34,83563	0	58,08736	19:44:10.0	22.431	0.0	61.852
141	19:44:11	35,79961	0	58,12414	19:44:11.0	35.163	0.0	61.834
142	19:44:12	39,12777	1,365965	58,13103	19:44:12.0	34.98	0.0	61.822
143	19:44:13	39,5783	0	58,10572	19:44:13.0	34.734	0.0	61.83
144	19:44:14	39,32286	0,7175108	58,10221	19:44:14.0	42.798	0.0	61.882
145	19:44:15	33,86003	0,5152971	58,10228	19:44:15.0	41.319	0.0	61.88
146	19:44:16	42,83469	0,2072779	58,11036	19:44:16.0	37.68	0.0	61.859
147	19:44:17	43,47655	0,0727492	58,14317	19:44:17.0	36.281	0.0	61.844
148	19:44:18	35,09532	0,9371647	58,12321	19:44:18.0	42.519	0.0	61.855
149	19:44:19	32,95145	0	58,10135	19:44:19.0	37.842	0.0	61.873
150	19:44:20	34,31575	0,427612	58,08394	19:44:20.0	34.166	0.0	61.868
151	19:44:21	33,86004	1,7421	58,07189	19:44:21.0	34.689	0.0	61.87
152	19:44:22	32,10414	0,6065488	58,06627	19:44:22.0	33.788	0.0	61.851
153	19:44:23	34,70568	0	58,07915	19:44:23.0	33.726	0.0	61.836
154	19:44:24	35,68016	0,8076165	58,1019	19:44:24.0	28.857	0.0	61.818
155	19:44:25	36,20123	0	58,10266	19:44:25.0	34.145	0.0	61.801
156	19:44:27	35,48524	0,2745556	58,0781	19:44:27.0	37.309	0.0	61.826
157	19:44:28	33,2748	0,7059216	58,08141	19:44:28.0	35.582	0.0	61.838
158	19:44:29	33,92594	0,5873699	58,07691	19:44:29.0	33.881	0.0	61.817
159	19:44:30	38,01915	1,255121	58,08437	19:44:30.0	32.725	0.0	61.804
160	19:44:31	34,4454	10,71684	58,07959	19:44:31.0	36.891	0.0	61.864
161	19:44:32	32,1716	8,4638	58,02999	19:44:32.0	34.344	0.0	61.881



162	19:44:33	32,95156	10,83677	58,00163	19:44:33.0	32.006	0.0	61.851
163	19:44:34	30,0278	46,2488	57,96614	19:44:34.0	32.048	0.0	61.816
164	19:44:35	33,73091	10,40498	57,94371	19:44:35.0	30.491	0.0	61.795
165	19:44:36	33,07952	16,49112	57,94787	19:44:36.0	33.457	0.0	61.765
166	19:44:37	29,05328	8,420021	57,91534	19:44:37.0	33.653	0.0	61.744
167	19:44:38	33,27473	45,84186	57,8595	19:44:38.0	28.893	0.0	61.729
168	19:44:39	33,53615	37,69821	57,81022	19:44:39.0	32.681	0.0	61.65
169	19:44:40	29,76295	52,38675	57,78485	19:44:40.0	34.507	0.0	61.62
170	19:44:41	32,36672	4,713976	57,77444	19:44:41.0	29.661	0.0	61.602
171	19:44:42	30,41759	19,56119	57,78413	19:44:42.0	31.812	0.0	61.582
172	19:44:43	30,54349	7,860182	57,78451	19:44:43.0	30.108	0.0	61.56
173	19:44:44	29,95792	40,22166	57,78521	19:44:44.0	30.57	0.0	61.543
174	19:44:45	28,46861	21,97933	57,76981	19:44:45.0	29.599	0.0	61.509
175	19:44:46	29,6379	18,37727	57,75797	19:44:46.0	28.11	0.0	61.483
176	19:44:47	24,18042	36,89818	57,76328	19:44:47.0	31.586	3.0	61.497
177	19:44:48	16,49589	70,70744	57,7777	19:44:48.0	23.113	2.0	61.496
178	19:44:49	18,4469	23,66886	57,786	19:44:49.0	17.737	2.0	61.495
179	19:44:50	19,61758	153,0473	57,77213	19:44:50.0	18.092	0.0	61.495
180	19:44:51	18,52817	127,0432	57,76363	19:44:51.0	19.945	3.0	61.495
181	19:44:52	18,91797	25,32888	57,75914	19:44:52.0	18.729	1.0	61.491
182	19:44:53	15,98334	36,25708	57,75615	19:44:53.0	18.315	0.0	61.485
183	19:44:54	20,22055	23,59795	57,79838	19:44:54.0	17.439	0.0	61.483
184	19:44:55	16,30066	23,93607	57,77741	19:44:55.0	20.698	0.0	61.483
185	19:44:56	17,86158	45,31157	57,76079	19:44:56.0	15.948	0.0	61.483
186	19:44:57	19,61754	68,80472	57,74577	19:44:57.0	18.901	0.0	61.479
187	19:44:58	18,13837	18,60835	57,7507	19:44:58.0	18.864	0.0	61.477
188	19:44:59	20,67212	14,21685	57,78157	19:44:59.0	17.161	0.0	61.477
189	19:45:00	21,64663	25,20332	57,75684	19:45:00.0	20.705	0.0	61.476
190	19:45:01	18,8872	9,305405	57,77559	19:45:01.0	21.981	0.0	61.473
191	19:45:02	17,47138	8,263622	57,76739	19:45:02.0	18.468	1.0	61.473
192	19:45:03	16,38423	10,75535	57,75488	19:45:03.0	19.199	0.0	61.473
193	19:45:04	20,47738	14,82759	57,76921	19:45:04.0	16.485	0.0	61.47
194	19:45:05	16,38419	74,81525	57,76928	19:45:05.0	17.179	0.0	61.469
195	19:45:06	17,16383	7,950098	57,77633	19:45:06.0	18.512	0.0	61.468
196	19:45:07	16,30066	8,391115	57,78305	19:45:07.0	17.949	0.0	61.468
197	19:45:08	17,27625	18,68066	57,77901	19:45:08.0	16.455	0.0	61.479
198	19:45:09	17,35874	62,47557	57,75577	19:45:09.0	15.464	0.0	61.477
199	19:45:10	18,72309	111,1054	57,76383	19:45:10.0	18.866	1.0	61.474
200	19:45:11	20,18773	132,9571	57,75725	19:45:11.0	17.612	1.0	61.473
201	19:45:12	18,64196	11,81953	57,76153	19:45:12.0	19.26	2.0	61.473
202	19:45:13	18,52813	31,52635	57,76246	19:45:13.0	19.4	0.0	61.473
203	19:45:14	19,81262	38,9657	57,75529	19:45:14.0	19.567	0.0	61.473
204	19:45:15	16,88604	40,75922	57,76036	19:45:15.0	18.067	0.0	61.473
205	19:45:16	18,64186	35,44666	57,76359	19:45:16.0	18.354	0.0	61.471
206	19:45:17	18,44693	8,709311	57,75861	19:45:17.0	19.018	1.0	61.471

207	19:45:18	18,25177	7,616939	57,75962	19:45:18.0	17.133	0.0	61.471
208	19:45:19	17,35877	8,725936	57,7705	19:45:19.0	17.798	0.0	61.469
209	19:45:20	21,37353	8,168784	57,75512	19:45:20.0	19.858	0.0	61.469
210	19:45:21	21,06194	26,53301	57,67994	19:45:21.0	21.028	0.0	61.469
211	19:45:22	23,14791	54,31764	57,66255	19:45:22.0	20.767	0.0	61.468
212	19:45:23	22,81621	10,66834	57,67826	19:45:23.0	16.734	0.0	61.393
213	19:45:24	23,79075	30,27971	57,71466	19:45:24.0	23.882	0.0	61.377
214	19:45:25	16,38419	12,94969	57,74092	19:45:25.0	25.66	0.0	61.377
215	19:45:26	17,86146	9,491399	57,74517	19:45:26.0	21.369	0.0	61.375
216	19:45:27	20,47733	8,685096	57,70806	19:45:27.0	16.987	0.0	61.375
217	19:45:28	19,11288	8,043568	57,6962	19:45:28.0	17.951	0.0	61.375
218	19:45:29	20,86716	15,49293	57,68903	19:45:29.0	20.908	0.0	61.371
219	19:45:31	20,28237	57,2812	57,69223	19:45:31.0	22.837	2.0	61.365
220	19:45:32	19,30778	46,27557	57,69864	19:45:32.0	19.614	0.0	61.365
221	19:45:33	20,2032	111,7143	57,69586	19:45:33.0	18.904	1.0	61.369
222	19:45:34	18,52851	82,06207	57,69416	19:45:34.0	19.532	1.0	61.367
223	19:45:35	18,64191	25,76675	57,69476	19:45:35.0	18.879	0.0	61.365
224	19:45:36	17,0811	41,8316	57,6797	19:45:36.0	17.96	1.0	61.364
225	19:45:37	17,92906	8,991742	57,69132	19:45:37.0	17.741	0.0	61.361
226	19:45:38	21,04827	46,53942	57,70598	19:45:38.0	17.633	0.0	61.36
227	19:45:39	15,32527	37,07309	57,694	19:45:39.0	20.284	0.0	61.36
228	19:45:40	18,44741	70,15187	57,68372	19:45:40.0	15.878	1.0	61.354
229	19:45:41	16,96882	9,567344	57,67824	19:45:41.0	18.533	3.0	61.353
230	19:45:42	14,2402	16,04984	57,67781	19:45:42.0	16.412	0.0	61.351
231	19:45:43	19,03227	12,41281	57,6841	19:45:43.0	15.717	0.0	61.351
232	19:45:44	17,08117	17,44917	57,71418	19:45:44.0	17.668	1.0	61.352
233	19:45:45	16,5791	17,71193	57,72245	19:45:45.0	17.397	0.0	61.351
234	19:45:46	26,05586	18,27136	57,86604	19:45:46.0	16.368	0.0	61.355
235	19:45:47	25,27553	5,368516	57,99574	19:45:47.0	22.249	0.0	61.414
236	19:45:48	21,56848	16,18564	57,98929	19:45:48.0	28.966	0.0	61.747
237	19:45:49	22,74089	1,656295	58,00481	19:45:49.0	21.574	0.0	61.782
238	19:45:50	23,743	9,18891	58,11271	19:45:50.0	21.926	0.0	61.759
239	19:45:51	34,05516	2,089587	57,99163	19:45:51.0	23.197	0.0	61.749
240	19:45:52	17,9435	0	57,97415	19:45:52.0	35.039	0.0	61.834
241	19:45:53	22,96987	1,988192	57,9654	19:45:53.0	21.104	0.0	61.779
242	19:45:54	24,7652	2,399799	57,97169	19:45:54.0	22.362	0.0	61.777
243	19:45:55	20,78815	0,5620366	57,97781	19:45:55.0	20.102	0.0	61.769
244	19:45:56	22,34899	0,4490879	58,01511	19:45:56.0	23.5	0.0	61.766
245	19:45:57	22,23145	1,322999	57,98197	19:45:57.0	23.941	0.0	61.762
246	19:45:58	20,28228	3,760377	57,98233	19:45:58.0	22.218	0.0	61.749
247	19:45:59	24,88539	0,2096448	57,98603	19:45:59.0	20.702	0.0	61.741
248	19:46:00	20,28236	0,1959697	57,97176	19:46:00.0	25.006	0.0	61.757
249	19:46:01	25,73975	0	57,99221	19:46:01.0	20.305	0.0	61.756
250	19:46:02	23,89934	2,014716	57,97876	19:46:02.0	23.577	0.0	61.754
251	19:46:03	20,78813	0,07704731	58,0088	19:46:03.0	20.455	0.0	61.756

252	19:46:04	22,77598	0,7812887	57,98137	19:46:04.0	24.722	0.0	61.754
253	19:46:05	19,3077	27,46111	57,98716	19:46:05.0	21.726	0.0	61.763
254	19:46:06	25,4837	98,34246	57,99118	19:46:06.0	21.787	0.0	61.769
255	19:46:07	26,71432	166,2654	57,98616	19:46:07.0	23.05	0.0	61.751
256	19:46:08	21,99614	8,254161	58,01033	19:46:08.0	26.703	3.0	60.996
257	19:46:09	21,35324	0,2919818	58,01409	19:46:09.0	23.596	0.0	60.926
258	19:46:10	22,15376	0,3343716	57,99802	19:46:10.0	23.97	0.0	60.993
259	19:46:11	20,59306	2,372782	57,97379	19:46:11.0	18.75	0.0	60.979
260	19:46:12	21,9586	3,503337	57,9581	19:46:12.0	19.67	0.0	60.975
261	19:46:13	24,33532	2,403307	57,97542	19:46:13.0	23.726	0.0	60.941
262	19:46:14	24,57042	0	57,99496	19:46:14.0	19.702	0.0	60.936
263	19:46:15	20,08749	0,473922	57,99658	19:46:15.0	28.163	0.0	60.937
264	19:46:16	19,46043	0,09358534	57,97951	19:46:16.0	24.18	0.0	60.945
265	19:46:17	22,93421	2,888692	57,97116	19:46:17.0	21.577	0.0	60.957
266	19:46:18	21,37357	6,167121	57,97855	19:46:18.0	18.357	0.0	60.947
267	19:46:19	28,27354	0,265101	58,00454	19:46:19.0	22.23	0.0	60.946
268	19:46:20	20,39789	0,1814054	58,01131	19:46:20.0	20.461	0.0	60.947
269	19:46:21	23,9856	2,708181	57,99228	19:46:21.0	28.942	0.0	60.97
270	19:46:22	20,00779	1,389637	57,99046	19:46:22.0	22.508	0.0	61.016
271	19:46:23	20,67227	2,168162	57,9875	19:46:23.0	21.946	0.0	60.992
272	19:46:25	25,93477	1,244294	57,98539	19:46:25.0	22.987	0.0	60.979
273	19:46:26	25,54493	1,522854	58,00282	19:46:26.0	24.56	1.0	60.974
274	19:46:27	23,40094	0	57,99457	19:46:27.0	25.498	0.0	60.976
275	19:46:28	27,22652	0,3678053	57,99649	19:46:28.0	20.259	0.0	60.996
276	19:46:29	25,48007	0,8331699	57,98381	19:46:29.0	27.229	0.0	60.981
277	19:46:30	28,66339	61,89211	57,96944	19:46:30.0	26.376	0.0	60.982
278	19:46:31	19,03211	15,17951	57,98991	19:46:31.0	28.797	0.0	60.994
279	19:46:32	22,34896	9,136365	57,95858	19:46:32.0	21.035	0.0	60.99
280	19:46:33	22,95971	8,903951	57,95708	19:46:33.0	21.7	1.0	60.976
281	19:46:34	21,84175	42,3765	57,94512	19:46:34.0	22.899	0.0	60.969
282	19:46:35	28,85837	4,779704	57,89035	19:46:35.0	23.0	0.0	60.97
283	19:46:36	25,73289	28,30984	57,84604	19:46:36.0	27.187	0.0	60.946
284	19:46:37	21,45173	109,3626	57,81101	19:46:37.0	25.479	0.0	60.922
285	19:46:38	23,56615	5,226722	57,76567	19:46:38.0	22.302	1.0	60.897
286	19:46:39	24,96008	12,76803	57,78647	19:46:39.0	24.821	1.0	60.818
287	19:46:40	22,34909	30,26477	57,73972	19:46:40.0	24.095	1.0	60.816
288	19:46:41	22,23157	5,430439	57,6979	19:46:41.0	23.05	0.0	60.785
289	19:46:42	20,28232	38,92299	57,68563	19:46:42.0	21.975	0.0	60.756
290	19:46:43	21,37341	8,921819	57,68584	19:46:43.0	19.987	0.0	60.727
291	19:46:44	19,30792	6,213906	57,69476	19:46:44.0	21.01	0.0	60.719
292	19:46:45	25,27553	21,31546	57,68986	19:46:45.0	19.201	0.0	60.711
293	19:46:46	19,61738	145,72	57,67037	19:46:46.0	25.627	1.0	60.709
294	19:46:47	21,17837	103,3574	57,67128	19:46:47.0	19.754	3.0	60.703
295	19:46:48	21,25725	135,0597	57,68307	19:46:48.0	21.02	2.0	60.674
296	19:46:49	19,69761	130,3952	57,67795	19:46:49.0	20.062	1.0	60.651

297	19:46:50	21,45191	206,9271	57,67989	19:46:50.0	21.752	0.0	60.631
298	19:46:51	21,42489	13,26932	57,68429	19:46:51.0	21.089	0.0	60.617
299	19:46:52	19,69457	7,101926	57,69479	19:46:52.0	22.485	0.0	60.614
300	19:46:53	17,16374	6,722997	57,67585	19:46:53.0	18.269	0.0	60.614
301	19:46:54	21,25694	6,339342	57,66872	19:46:54.0	20.126	0.0	60.61
302	19:46:55	20,67211	7,684816	57,69527	19:46:55.0	21.749	0.0	60.61
303	19:46:56	20,98339	20,10725	57,67934	19:46:56.0	17.764	0.0	60.609
304	19:46:57	19,81283	36,21165	57,70686	19:46:57.0	20.014	1.0	60.609
305	19:46:58	22,61523	5,70753	57,69048	19:46:58.0	22.758	0.0	60.61
306	19:46:59	28,78734	53,87129	57,78248	19:46:59.0	21.359	0.0	60.61
307	19:47:00	24,32603	113,0415	57,78394	19:47:00.0	22.128	0.0	60.618
308	19:47:01	28,20185	105,6025	57,81278	19:47:01.0	28.665	1.0	60.74
309	19:47:02	23,71461	215,8427	57,82765	19:47:02.0	25.568	1.0	60.809
310	19:47:04	26,71427	194,3572	57,83963	19:47:04.0	24.068	1.0	60.844
311	19:47:05	21,37333	133,6049	57,81015	19:47:05.0	27.139	1.0	60.852
312	19:47:06	26,83645	30,39804	57,83196	19:47:06.0	20.851	3.0	60.852
313	19:47:07	23,79072	83,36995	57,82825	19:47:07.0	27.018	1.0	60.858
314	19:47:08	23,59573	9,649028	57,81538	19:47:08.0	23.586	0.0	60.86
315	19:47:09	23,71471	115,1579	57,81828	19:47:09.0	23.688	0.0	60.859
316	19:47:10	40,94268	103,383	57,84432	19:47:10.0	23.967	2.0	60.861
317	19:47:11	20,4773	49,07451	57,77335	19:47:11.0	37.309	1.0	60.876
318	19:47:12	15,52035	57,1978	57,76892	19:47:12.0	23.017	0.0	60.839
319	19:47:13	18,64202	11,98823	57,76447	19:47:13.0	16.643	1.0	60.819
320	19:47:14	19,11285	5,535793	57,78181	19:47:14.0	16.766	1.0	60.814
321	19:47:15	18,91807	27,07224	57,78085	19:47:15.0	20.86	0.0	60.812
322	19:47:16	17,9434	16,38212	57,79638	19:47:16.0	19.86	0.0	60.811
323	19:47:17	20,28239	13,60146	57,76653	19:47:17.0	18.441	0.0	60.811
324	19:47:18	18,91775	5,600863	57,77076	19:47:18.0	20.614	0.0	60.808
325	19:47:19	18,13818	45,67924	57,76751	19:47:19.0	18.876	0.0	60.807
326	19:47:20	16,7722	60,88	57,76483	19:47:20.0	18.331	0.0	60.805
327	19:47:21	21,45182	14,24257	57,77311	19:47:21.0	17.595	0.0	60.805
328	19:47:22	17,86165	6,092537	57,76545	19:47:22.0	18.552	0.0	60.804
329	19:47:23	19,03217	14,57739	57,75407	19:47:23.0	20.471	1.0	60.804
330	19:47:24	18,91804	17,07331	57,74766	19:47:24.0	17.716	0.0	60.798
331	19:47:25	20,67221	18,04155	57,7529	19:47:25.0	20.271	1.0	60.79
332	19:47:26	20,86703	13,80396	57,77284	19:47:26.0	17.507	0.0	60.789
333	19:47:27	24,49506	12,74429	57,75924	19:47:27.0	23.393	0.0	60.79
334	19:47:28	19,6977	66,45265	57,76777	19:47:28.0	20.891	0.0	60.79
335	19:47:29	16,18938	34,94598	57,76378	19:47:29.0	23.003	1.0	60.782
336	19:47:30	21,25684	12,07097	57,75959	19:47:30.0	17.42	0.0	60.782
337	19:47:31	24,49503	18,88623	57,76749	19:47:31.0	18.105	0.0	60.778
338	19:47:32	20,7881	25,69795	57,75311	19:47:32.0	22.35	0.0	60.778
339	19:47:33	19,89257	8,958365	57,7601	19:47:33.0	21.786	0.0	60.781
340	19:47:34	22,60409	5,75761	57,79456	19:47:34.0	22.569	0.0	60.777
341	19:47:35	23,98572	11,54076	57,78513	19:47:35.0	23.184	0.0	60.782

342	19:47:36	18,44687	10,35561	57,77834	19:47:36.0	23.15	0.0	60.788
343	19:47:37	17,9435	60,83167	57,77672	19:47:37.0	20.848	0.0	60.785
344	19:47:38	23,14838	146,9114	57,7705	19:47:38.0	17.679	2.0	60.788
345	19:47:39	23,08848	10,38496	57,7656	19:47:39.0	19.689	4.0	60.782
346	19:47:40	19,89262	28,78335	57,77406	19:47:40.0	24.153	0.0	60.779
347	19:47:41	17,16388	14,64707	57,75414	19:47:41.0	21.129	0.0	60.78
348	19:47:42	19,03221	5,148365	57,75782	19:47:42.0	18.902	0.0	60.541
349	19:47:43	16,60554	8,41421	57,7517	19:47:43.0	17.575	0.0	60.533
350	19:47:44	17,8616	45,15557	57,75003	19:47:44.0	18.742	1.0	60.535
351	19:47:45	19,42237	10,73694	57,74828	19:47:45.0	16.94	0.0	60.533
352	19:47:46	29,4088	24,73025	58,07122	19:47:46.0	16.581	1.0	60.53
353	19:47:48	32,88464	2,341553	58,06378	19:47:48.0	30.166	0.0	60.952
354	19:47:49	35,87503	1,822512	58,05168	19:47:49.0	33.123	0.0	60.932
355	19:47:50	31,39213	5,919392	58,05072	19:47:50.0	34.883	0.0	60.91
356	19:47:51	35,68015	34,05211	58,05618	19:47:51.0	31.715	1.0	60.943
357	19:47:52	33,34118	1,825879	58,05206	19:47:52.0	36.256	0.0	60.928
358	19:47:53	31,39202	1,593295	58,0638	19:47:53.0	34.676	0.0	60.949
359	19:47:54	35,42081	2,843601	58,04503	19:47:54.0	32.005	0.0	60.931
360	19:47:55	36,39619	0	58,04943	19:47:55.0	35.715	0.0	60.898
361	19:47:56	36,59169	0,6004238	58,04902	19:47:56.0	35.554	0.0	60.947
362	19:47:57	34,90051	0,9032185	58,0453	19:47:57.0	37.444	0.0	60.929
363	19:47:58	36,06989	0,4644138	58,09272	19:47:58.0	33.642	0.0	60.919
364	19:47:59	35,42094	2,967172	58,08867	19:47:59.0	35.135	0.0	60.973
365	19:48:00	37,88608	12,73509	58,06187	19:48:00.0	34.822	0.0	61.006
366	19:48:01	35,68017	0,4413553	58,05328	19:48:01.0	37.612	0.0	60.992
367	19:48:02	34,44556	0,08434921	58,05936	19:48:02.0	36.328	0.0	60.982
368	19:48:03	39,51815	24,14575	58,05211	19:48:03.0	34.692	0.0	60.967
369	19:48:04	37,76216	1,953752	58,06005	19:48:04.0	38.68	0.0	60.97
370	19:48:05	34,90046	0,4512453	58,08365	19:48:05.0	37.845	0.0	60.951
371	19:48:06	33,92586	0	58,02755	19:48:06.0	35.396	0.0	60.986
372	19:48:07	32,3666	0	57,98441	19:48:07.0	31.473	0.0	60.974
373	19:48:08	34,51083	0,07409632	57,99543	19:48:08.0	35.765	0.0	60.897
374	19:48:09	35,29046	5,933893	57,98828	19:48:09.0	32.552	0.0	60.881
375	19:48:10	35,61642	0	57,97807	19:48:10.0	35.149	0.0	60.864
376	19:48:11	35,68005	2,553722	57,97444	19:48:11.0	35.631	0.0	60.85
377	19:48:12	37,43442	0,9541761	58,02188	19:48:12.0	35.61	0.0	60.878
378	19:48:13	35,87546	0,07389013	58,01468	19:48:13.0	35.586	0.0	60.866
379	19:48:14	29,95805	0	57,99017	19:48:14.0	33.448	0.0	60.853
380	19:48:15	36,78664	1,416569	57,98756	19:48:15.0	34.13	0.0	60.863
381	19:48:16	32,2993	0	57,99003	19:48:16.0	35.458	0.0	60.849
382	19:48:17	36,20138	0,0754589	58,00397	19:48:17.0	34.483	0.0	60.837
383	19:48:18	35,09547	0	57,98491	19:48:18.0	33.992	0.0	60.863
384	19:48:19	35,87498	0	57,98635	19:48:19.0	35.002	0.0	60.852

**Elaborado por:** Jayron Silva, Anjelo Minango

## RECOPIACIÓN DE DATOS MÉTRICA CAPACIDAD

Esta métrica define el grado máximo de uso de recursos cuando el software cumple una acción específica, y gracias al software SPSS podemos obtener este dato para su análisis.

### TIEMPO DE REPSUESTA

#### MÉTODO INSERTAR

Insertar	Dapper	Media		1,929094	,2965837
	95% de intervalo de confianza para la media	Límite inferior		1,345958	
		Límite superior		2,512230	
	Media recortada al 5%			1,307431	
	Mediana			1,002800	
	Varianza			33,777	
	Desv. Desviación			5,8118299	
	Mínimo			,0000	
	Máximo			78,9255	
	Rango			78,9255	
	Rango intercuartil			,9982	
	Asimetría			10,434	,125
	Curtosis			114,945	,248
Entity F	Media			4,170381	,5595161
	95% de intervalo de confianza para la media	Límite inferior		3,070273	
		Límite superior		5,270489	
	Media recortada al 5%			3,198058	
	Mediana			3,001000	
	Varianza			120,214	
	Desv. Desviación			10,9642313	
	Mínimo			1,9843	
	Máximo			202,4114	

**Ilustración 33.** Datos Capacidad Tiempos de repuesta insertar

**Fuente:** IBM SPSS 25 statistics 25

#### MÉTODO MOSTRAR

Mostrar	Dapper	Media		3,044809	,5771090
	95% de intervalo de confianza para la media	Límite inferior		1,910111	
		Límite superior		4,179508	
	Media recortada al 5%			1,413297	
	Mediana			1,000100	
	Varianza			127,893	
	Desv. Desviación			11,3089808	
	Mínimo			,9815	
	Máximo			175,8368	
Entity F	Media			6,924488	,6381383
	95% de intervalo de confianza para la media	Límite inferior		5,669795	
		Límite superior		8,179181	
	Media recortada al 5%			5,055403	
	Mediana			4,996350	
	Varianza			156,373	
	Desv. Desviación			12,5049059	
	Mínimo			3,7351	
	Máximo			202,8136	

**Ilustración 34.** Datos Capacidad Tiempos de respuesta mostrar

**Fuente:** IBM SPSS 25 statistics 25

## MÉTODO ACTUALIZAR

Actualizar	Dapper	Media		,577695	,0252163
		95% de intervalo de confianza para la media	Límite inferior	,528116	
			Límite superior	,627275	
		Media recortada al 5%		,586284	
		Mediana		,998500	
		Varianza		,244	
		Desv. Desviación		,4941360	
		Mínimo		,0000	
		Máximo		1,0044	
		Rango		1,0044	
		Rango intercuartil		,9993	
		Asimetría		-,318	,125
		Curtosis		-1,909	,248
		Entity F		Media	
95% de intervalo de confianza para la media	Límite inferior			1,862249	
	Límite superior			2,024370	
Media recortada al 5%				1,921069	
Mediana				1,998200	
Varianza				,653	
Desv. Desviación				,8078895	
Mínimo				,9890	
Máximo				15,9848	

**Ilustración 35.** Datos Capacidad Tiempos de respuesta Actualizar  
Fuente: IBM SPSS 25 statistics 25

## MÉTODO ELIMINAR

Eliminar	Dapper	Media		1,556090	,0297011
		95% de intervalo de confianza para la media	Límite inferior	1,497692	
			Límite superior	1,614487	
		Media recortada al 5%		1,507105	
		Mediana		1,442250	
		Varianza		,339	
		Desv. Desviación		,5820209	
		Mínimo		,8926	
		Máximo		3,5542	
		Rango		2,6616	
		Rango intercuartil		1,0001	
		Asimetría		,698	,125
		Curtosis		-,109	,248
		Entity F		Media	
95% de intervalo de confianza para la media	Límite inferior			4,773615	
	Límite superior			5,613277	
Media recortada al 5%				4,805438	
Mediana				4,995200	
Varianza				17,508	
Desv. Desviación				4,1842471	
Mínimo				1,9966	
Máximo				52,9531	

**Ilustración 36.** Datos Capacidad Tiempo de respuesta Eliminar  
Fuente: IBM SPSS 25 statistics 25

**UTILIZACIÓN DE RECURSOS**  
**MÉTODO INSERTAR**  
**JMETER**

CPU	Dapper	Media		24,745698	,3841679
		95% de intervalo de confianza para la media	Límite inferior	23,990356	
			Límite superior	25,501040	
		Media recortada al 5%		24,324180	
		Mediana		22,358500	
		Varianza		56,673	
		Desv. Desviación		7,5281219	
		Mínimo		14,7750	
		Máximo		52,4510	
		Rango		37,6760	
		Rango intercuartil		12,9750	
		Asimetría		,696	,125
		Curtosis		-,304	,248
		Entity F		Media	
95% de intervalo de confianza para la media	Límite inferior			25,508777	
	Límite superior			27,095062	
Media recortada al 5%				26,089571	
Mediana				23,482000	
Varianza				62,487	
Desv. Desviación				7,9048592	
Mínimo				3,9620	
Máximo				47,6840	

**Ilustración 37.** Datos con Jmeter, para la métrica Capacidad, Utilización de recursos CPU  
**Fuente:** IBM SPSS 25 statistics 25

Disco	Dapper	Media		,348958	,0373564		
		95% de intervalo de confianza para la media	Límite inferior	,275509			
			Límite superior	,422408			
		Media recortada al 5%		,241898			
		Mediana		,000000			
		Varianza		,536			
		Desv. Desviación		,7320339			
		Mínimo		,0000			
		Máximo		6,0000			
		Entity F		Media		,364583	,0446311
				95% de intervalo de confianza para la media	Límite inferior	,276831	
					Límite superior	,452336	
				Media recortada al 5%		,227431	
				Mediana		,000000	
Varianza				,765			
Desv. Desviación				,8745881			
Mínimo				,0000			
Máximo				8,0000			

**Ilustración 38.** Datos con Jmeter, para la métrica Capacidad, Utilización de recursos Disco  
**Fuente:** IBM SPSS 25 statistics 25



RAM	Dapper	Media		62,819924	,0371913
		95% de intervalo de confianza para la media	Límite inferior	62,746800	
			Límite superior	62,893049	
		Media recortada al 5%		62,842756	
		Mediana		63,027500	
		Varianza		,531	
		Desv. Desviación		,7287972	
		Mínimo		60,3360	
		Máximo		64,6250	
		Rango		4,2890	
		Rango intercuartil		,9507	
		Asimetría		-,814	,125
		Curtosis		-,163	,248
		Entity F		Media	
95% de intervalo de confianza para la media	Límite inferior			59,642251	
	Límite superior			59,725171	
Media recortada al 5%				59,690898	
Mediana				59,744000	
Varianza				,171	
Desv. Desviación				,4132112	
Mínimo				58,3130	
Máximo				60,5360	

**Ilustración 39.** Datos con Jmeter, para la métrica Capacidad, Utilización de recursos RAM  
**Fuente:** IBM SPSS 25 statistics 25

### MÉTODO INSERTAR – LIBRERÍA SYSTEM.DIAGNOSTIC EN VISUAL STUDIO

CPU	Dapper	Media		24,809620	,3859522
		95% de intervalo de confianza para la media	Límite inferior	24,050770	
			Límite superior	25,568470	
		Media recortada al 5%		24,400767	
		Mediana		22,506635	
		Varianza		57,200	
		Desv. Desviación		7,5630870	
		Mínimo		14,4350	
		Máximo		51,2728	
		Rango		36,8378	
		Rango intercuartil		13,2672	
		Asimetría		,674	,125
		Curtosis		-,395	,248
		Entity f		Media	
95% de intervalo de confianza para la media	Límite inferior			25,703245	
	Límite superior			27,295397	
Media recortada al 5%				26,218355	
Mediana				23,400925	
Varianza				62,950	
Desv. Desviación				7,9340965	
Mínimo				15,3252	
Máximo				51,0292	

**Ilustración 40.** Datos con System.Diagnostic en Visual Studio, para la métrica Capacidad, Utilización de recursos CPU

Fuente: IBM SPSS 25 statistics 25

	Media recortada al 5%		23,640059	
	Mediana		13,791755	
	Varianza		3131,943	
	Desv. Desviación		55,9637642	
	Mínimo		,0000	
	Máximo		551,8003	
	Rango		551,8003	
	Rango intercuartil		31,7197	
	Asimetría		4,310	,125
	Curtosis		26,046	,248
Entity f	Media		35,009810	3,0459035
	95% de intervalo de confianza para la media	Límite inferior	29,021024	
		Límite superior	40,998596	
	Media recortada al 5%		25,550319	
	Mediana		10,491560	
	Varianza		3562,571	
	Desv. Desviación		59,6872743	
	Mínimo		,0000	
	Máximo		356,3795	

Ilustración 41. Datos con System.Diagnostic en Visual Studio, para la métrica Capacidad, Utilización de recursos Disco

Fuente: IBM SPSS 25 statistics 25

RAM	Dapper	Media		58,165883	,0103985
		95% de intervalo de confianza para la media	Límite inferior	58,145438	
			Límite superior	58,186328	
		Media recortada al 5%		58,153377	
		Mediana		58,123465	
		Varianza		,042	
		Desv. Desviación		,2037681	
		Mínimo		57,9352	
		Máximo		58,8534	
	Entity f	Media		57,137531	,0101563
		95% de intervalo de confianza para la media	Límite inferior	57,117562	
			Límite superior	57,157500	
		Media recortada al 5%		57,138222	
		Mediana		57,083830	
		Varianza		,040	
		Desv. Desviación		,1990215	
		Mínimo		56,8353	
		Máximo		57,6311	

Ilustración 42. Datos con System.Diagnostic en Visual Studio, para la métrica Capacidad, Utilización de recursos RAM

Fuente: IBM SPSS 25 statistics 25

## MÉTODO MOSTRAR

### JMETER

CPU	Dapper	Media		24,589156	,3853311
		95% de intervalo de confianza para la media	Límite inferior	23,831527	
			Límite superior	25,346785	
		Media recortada al 5%		24,187484	
		Mediana		22,007000	
		Varianza		57,016	
		Desv. Desviación		7,5509167	
		Mínimo		14,6640	
		Máximo		55,9710	
		Rango		41,3070	
		Rango intercuartil		12,6160	
		Asimetría		,780	,125
		Curtosis		-,171	,248
	Entity F	Media		24,718536	,3541458
		95% de intervalo de confianza para la media	Límite inferior	24,022223	
			Límite superior	25,414850	
		Media recortada al 5%		24,371335	
		Mediana		22,482500	
		Varianza		48,161	
		Desv. Desviación		6,9398128	
		Mínimo		15,0600	
		Máximo		45,3310	

**Ilustración 43.** Datos con Jmeter, para la métrica Capacidad, Utilización de recursos CPU

**Fuente:** IBM SPSS 25 statistics 25

		95% de intervalo de confianza para la media	Límite inferior	,230947	
			Límite superior	,383636	
		Media recortada al 5%		,178241	
		Mediana		,000000	
		Varianza		,579	
		Desv. Desviación		,7608906	
		Mínimo		,0000	
		Máximo		5,0000	
		Rango		5,0000	
		Rango intercuartil		,0000	
		Asimetría		3,208	,125
		Curtosis		11,940	,248
	Entity F	Media		,197917	,0289144
		95% de intervalo de confianza para la media	Límite inferior	,141066	
			Límite superior	,254767	
		Media recortada al 5%		,094329	
		Mediana		,000000	
		Varianza		,321	
		Desv. Desviación		,5666039	
		Mínimo		,0000	
		Máximo		4,0000	

**Ilustración 44.** Datos con Jmeter, para la métrica Capacidad, Utilización de recursos Disco

**Fuente:** IBM SPSS 25 statistics 25

RAM	Dapper	Media		61,376424	,0528201
		95% de intervalo de confianza para la media	Límite inferior	61,272571	
			Límite superior	61,480278	
		Media recortada al 5%		61,459730	
		Mediana		61,488500	
		Varianza		1,071	
		Desv. Desviación		1,0350576	
		Mínimo		56,6790	
		Máximo		63,0550	
		Entity F	Entity F	Media	
95% de intervalo de confianza para la media	Límite inferior			60,869329	
	Límite superior			60,975260	
Media recortada al 5%				60,947157	
Mediana				61,015000	
Varianza				,279	
Desv. Desviación				,5278822	
Mínimo				57,8090	
Máximo				62,2710	

**Ilustración 45.** Datos con Jmeter, para la métrica Capacidad, Utilización de recursos RAM  
**Fuente:** IBM SPSS 25 statistics 25

#### DATOS OBTENIDOS CON LA HERRAMIENTA VISUAL STUDIO

CPU	Dapper	Media		24,4964	,38250		
		95% de intervalo de confianza para la media	Límite inferior	23,7443			
			Límite superior	25,2485			
		Media recortada al 5%		24,1227			
		Mediana		22,0550			
		Varianza		56,183			
		Desv. Desviación		7,49551			
		Mínimo		14,44			
		Máximo		51,32			
		Rango		36,89			
		Rango intercuartil		12,81			
		Asimetría		,689	,125		
		Curtosis		-,567	,248		
		Entity F	Entity F	Media		24,7572	,36267
				95% de intervalo de confianza para la media	Límite inferior	24,0441	
Límite superior	25,4703						
Media recortada al 5%				24,3836			
Mediana				22,3877			
Varianza				50,508			
Desv. Desviación				7,10691			
Mínimo				15,37			
Máximo				45,82			

**Ilustración 46.** Datos con System.Diagnostic en Visual Studio, para la métrica Capacidad, Utilización de recursos CPU  
**Fuente:** IBM SPSS 25 statistics 25

Disco	Dapper	Media		33,2021	2,91752
		95% de intervalo de confianza para la media	Límite inferior	27,4657	
			Límite superior	38,9384	
		Media recortada al 5%		23,6373	
		Mediana		10,3603	
		Varianza		3268,570	
		Desv. Desviación		57,17141	
		Mínimo		,00	
		Máximo		402,98	
	Entity F	Media		23,4423	1,85714
		95% de intervalo de confianza para la media	Límite inferior	19,7908	
			Límite superior	27,0937	
		Media recortada al 5%		17,9986	
		Mediana		9,6685	
		Varianza		1324,404	
		Desv. Desviación		36,39236	
		Mínimo		,00	
		Máximo		282,18	

**Ilustración 47.** Datos con System.Diagnostic en Visual Studio, para la métrica Capacidad, Utilización de recursos Disco

**Fuente:** IBM SPSS 25 statistics 25

RAM	Dapper	Media		57,7561	,02357
		95% de intervalo de confianza para la media	Límite inferior	57,7098	
			Límite superior	57,8025	
		Media recortada al 5%		57,7340	
		Mediana		57,7207	
		Varianza		,213	
		Desv. Desviación		,46190	
		Mínimo		57,11	
		Máximo		58,79	
		Rango		1,67	
		Rango intercuartil		,59	
		Asimetría		,563	,125
		Curtosis		-,311	,248
	Entity F	Media		57,2011	,00897
		95% de intervalo de confianza para la media	Límite inferior	57,1835	
			Límite superior	57,2187	
		Media recortada al 5%		57,1927	
		Mediana		57,2240	
		Varianza		,031	
		Desv. Desviación		,17581	
		Mínimo		56,95	
		Máximo		58,01	

**Ilustración 48.** Datos con System.Diagnostic en Visual Studio, para la métrica Capacidad, Utilización de recursos RAM

**Fuente:** IBM SPSS 25 statistics 25

## MÉTODO ACTUALIZAR HERRAMIENTA JMETER

CPU	Dapper	Media		19,857336	,2304013
		95% de intervalo de confianza para la media	Límite inferior	19,404326	
			Límite superior	20,310346	
		Media recortada al 5%		19,458600	
		Mediana		19,090000	
		Varianza		20,385	
		Desv. Desviación		4,5149257	
		Mínimo		4,5980	
		Máximo		37,0270	
		Rango		32,4290	
		Rango intercuartil		5,3287	
		Asimetría		1,247	,125
		Curtosis		2,108	,248
	Entity F	Media		20,495065	,1917875
		95% de intervalo de confianza para la media	Límite inferior	20,117977	
			Límite superior	20,872153	
		Media recortada al 5%		20,161517	
		Mediana		19,694000	
		Varianza		14,124	
		Desv. Desviación		3,7582517	
		Mínimo		13,9430	
		Máximo		43,3620	

**Ilustración 49.** Datos con JMeter, para la métrica Capacidad, Utilización de recursos CPU  
Fuente: IBM SPSS 25 statistics 25

Disco	Dapper	Media		,192708	,0260417
		95% de intervalo de confianza para la media	Límite inferior	,141506	
			Límite superior	,243911	
		Media recortada al 5%		,115162	
		Mediana		,000000	
		Varianza		,260	
		Desv. Desviación		,5103104	
		Mínimo		,0000	
		Máximo		4,0000	
	Entity F	Media		,276042	,0311535
		95% de intervalo de confianza para la media	Límite inferior	,214788	
			Límite superior	,337295	
		Media recortada al 5%		,184028	
		Mediana		,000000	
		Varianza		,373	
		Desv. Desviación		,6104819	
		Mínimo		,0000	
		Máximo		4,0000	

**Ilustración 50.** Datos con JMeter, para la métrica Capacidad, Utilización de recursos Disco  
Fuente: IBM SPSS 25 statistics 25

RAM	Dapper	Media		62,299073	,0167063
		95% de intervalo de confianza para la media	Límite inferior	62,266225	
			Límite superior	62,331920	
		Media recortada al 5%		62,295082	
		Mediana		62,381500	
		Varianza		,107	
		Desv. Desviación		,3273753	
		Mínimo		61,0290	
		Máximo		62,9070	
		Rango		1,8780	
		Rango intercuartil		,5410	
		Asimetría		-,108	,125
	Curtosis		-,832	,248	
	Entity F	Media		61,391690	,0191227
		95% de intervalo de confianza para la media	Límite inferior	61,354091	
Límite superior			61,429289		
Media recortada al 5%			61,377481		
Mediana			61,352000		
Varianza			,140		
Desv. Desviación			,3747271		
Mínimo			60,7710		
Máximo		63,2520			

**Ilustración 51.** Datos con JMeter, para la métrica Capacidad, Recolección de datos RAM  
**Fuente:** IBM SPSS 25 statistics 25

### LIBRERÍA SYSTEM.DIAGNOSTIC EN VISUAL STUDIO MÉTODO ACTUALIZAR

CPU	Dapper	Media		19,989811	,2315994
		95% de intervalo de confianza para la media	Límite inferior	19,534446	
			Límite superior	20,445177	
		Media recortada al 5%		19,558618	
		Mediana		19,032240	
		Varianza		20,597	
		Desv. Desviación		4,5384032	
		Mínimo		13,5692	
		Máximo		37,0444	
		Rango		23,4753	
		Rango intercuartil		5,2931	
		Asimetría		1,408	,125
	Curtosis		2,082	,248	
	Entity F	Media		20,445998	,1924543
		95% de intervalo de confianza para la media	Límite inferior	20,067599	
Límite superior			20,824398		
Media recortada al 5%			20,111332		
Mediana			19,755110		
Varianza			14,223		
Desv. Desviación			3,7713190		
Mínimo			14,5450		
Máximo		44,8409			

**Ilustración 52.** Datos con System.Diagnostic en Visual Studio, para la métrica Capacidad, Utilización de recursos CPU  
**Fuente:** IBM SPSS 25 statistics 25

	95% de intervalo de confianza para la media	Límite inferior	18,947985	
		Límite superior	24,742278	
	Media recortada al 5%		18,329153	
	Mediana		9,893871	
	Varianza		833,733	
	Desv. Desviación		28,8744288	
	Mínimo		,0000	
	Máximo		258,2249	
	Rango		258,2249	
	Rango intercuartil		27,5337	
	Asimetría		2,726	,125
	Curtosis		12,935	,248
Entity F	Media		24,314456	1,8753478
	95% de intervalo de confianza para la media	Límite inferior	20,627190	
		Límite superior	28,001722	
	Media recortada al 5%		19,573156	
	Mediana		10,909240	
	Varianza		1350,501	
	Desv. Desviación		36,7491617	
	Mínimo		,0000	
	Máximo		433,0443	

**Ilustración 53.** Datos con System.Diagnostic en Visual Studio, para la métrica Capacidad, utilización de recursos Disco

**Fuente:** IBM SPSS 25 statistics 25

RAM	Dapper	Media	57,812031	,0078987
		95% de intervalo de confianza para la media	Límite inferior	57,796501
			Límite superior	57,827561
		Media recortada al 5%	57,808984	
		Mediana	57,752790	
		Varianza	,024	
		Desv. Desviación	,1547833	
		Mínimo	57,6034	
		Máximo	58,0720	
	Entity F	Media	57,327814	,0098408
		95% de intervalo de confianza para la media	Límite inferior	57,308465
			Límite superior	57,347163
		Media recortada al 5%	57,310295	
		Mediana	57,273020	
		Varianza	,037	
		Desv. Desviación	,1928405	
		Mínimo	57,1074	
		Máximo	58,1711	

**Ilustración 54.** Datos con System.Diagnostic en Visual Studio, para la métrica Capacidad, Utilización de recursos RAM

**Fuente:** IBM SPSS 25 statistics 25

**MÉTODO ELIMINAR  
HERRAMIENTA JMETER**



CPU	Dapper	Media		25,964078	,4133624
		95% de intervalo de confianza para la media	Límite inferior	25,151334	
			Límite superior	26,776822	
		Media recortada al 5%		25,501631	
		Mediana		23,407500	
		Varianza		65,613	
		Desv. Desviación		8,1002148	
		Mínimo		14,2250	
		Máximo		56,7520	
		Rango		42,5270	
		Rango intercuartil		13,8245	
		Asimetría		,716	,125
		Curtosis		,054	,248
		Entity F		Media	
95% de intervalo de confianza para la media	Límite inferior			23,669295	
	Límite superior			24,983033	
Media recortada al 5%				23,953146	
Mediana				22,496500	
Varianza				42,859	
Desv. Desviación				6,5466928	
Mínimo				3,3220	
Máximo				43,0230	

**Ilustración 55.** Datos con JMeter, para la métrica Capacidad, Utilización de recursos CPU  
**Fuente:** IBM SPSS 25 statistics 25

Disco	Dapper	Media		,268229	,0389717		
		95% de intervalo de confianza para la media	Límite inferior	,191604			
			Límite superior	,344855			
		Media recortada al 5%		,143519			
		Mediana		,000000			
		Varianza		,583			
		Desv. Desviación		,7636869			
		Mínimo		,0000			
		Máximo		8,0000			
		Entity F		Media		,317708	,0419842
				95% de intervalo de confianza para la media	Límite inferior	,235160	
Límite superior	,400257						
Media recortada al 5%				,178241			
Mediana				,000000			
Varianza				,677			
Desv. Desviación				,8227185			
Mínimo				,0000			
Máximo				7,0000			

**Ilustración 56.** Datos con JMeter, para la métrica Capacidad, Utilización de recursos Disco  
**Fuente:** IBM SPSS 25 statistics 25

RAM	Dapper	Media		61,838938	,0330370
		95% de intervalo de confianza para la media	Límite inferior	61,773981	
			Límite superior	61,903894	
		Media recortada al 5%		61,818221	
		Mediana		61,611000	
		Varianza		,419	
		Desv. Desviación		,6473907	
		Mínimo		59,4200	
		Máximo		63,4110	
		Rango		3,9910	
		Rango intercuartil		,6015	
		Asimetría		,798	,125
		Curtosis		,380	,248
		Entity F	Entity F	Media	
95% de intervalo de confianza para la media	Límite inferior			61,352969	
	Límite superior			61,456000	
Media recortada al 5%				61,378030	
Mediana				61,473000	
Varianza				,264	
Desv. Desviación				,5134287	
Mínimo				60,5300	
Máximo				63,6990	

**Ilustración 57.** Datos con JMeter, para la métrica Capacidad, Utilización de recursos RAM

Fuente: IBM SPSS 25 statistics 25

CPU	Dapper	Media		26,043773	,4245830
		95% de intervalo de confianza para la media	Límite inferior	25,208967	
			Límite superior	26,878578	
		Media recortada al 5%		25,563774	
		Mediana		23,155150	
		Varianza		69,224	
		Desv. Desviación		8,3200931	
		Mínimo		14,0453	
		Máximo		55,5165	
		Rango		41,4712	
		Rango intercuartil		14,4820	
		Asimetría		,701	,125
		Curtosis		-,119	,248
		Entity F	Entity F	Media	
95% de intervalo de confianza para la media	Límite inferior			23,752390	
	Límite superior			25,059697	
Media recortada al 5%				24,032809	
Mediana				22,348940	
Varianza				42,441	
Desv. Desviación				6,5146430	
Mínimo				14,2402	
Máximo				43,4766	

**Ilustración 58.** Datos con System.Diagnostic en Visual Studio, para la métrica Capacidad, Utilización de recursos CPU

Fuente: IBM SPSS 25 statistics 25

Disco	Dapper	Media		22,013655	1,9632914
		95% de intervalo de confianza para la media	Límite inferior	18,153476	
			Límite superior	25,873834	
		Media recortada al 5%		16,827454	
		Mediana		9,532933	
		Varianza		1480,133	
		Desv. Desviación		38,4724974	
		Mínimo		,0000	
		Máximo		364,0984	
Entity F		Media		26,833058	2,1445175
		95% de intervalo de confianza para la media	Límite inferior	22,616556	
			Límite superior	31,049559	
		Media recortada al 5%		20,545874	
		Mediana		9,734250	
		Varianza		1765,999	
		Desv. Desviación		42,0237891	
		Mínimo		,0000	
		Máximo		303,9804	

**Ilustración 59.** Datos con System.Diagnostic en Visual Studio, para la métrica Capacidad, Utilización de recursos Disco

Fuente: IBM SPSS 25 statistics 25

RAM	Dapper	Media		57,318690	,0199743
		95% de intervalo de confianza para la media	Límite inferior	57,279417	
			Límite superior	57,357963	
		Media recortada al 5%		57,280704	
		Mediana		57,220970	
		Varianza		,153	
		Desv. Desviación		,3914155	
		Mínimo		56,9823	
		Máximo		58,4510	
		Rango		1,4687	
		Rango intercuartil		,3164	
		Asimetría		1,650	,125
		Curtosis		1,662	,248
	Entity F	Media		57,892106	,0083427
		95% de intervalo de confianza para la media	Límite inferior	57,875702	
			Límite superior	57,908509	
		Media recortada al 5%		57,882991	
		Mediana		57,834840	
		Varianza		,027	
		Desv. Desviación		,1634822	
		Mínimo		57,6626	
		Máximo		58,6442	

**Ilustración 60.** Datos con System.Diagnostic en Visual Studio, para la métrica Capacidad, Utilización de recursos RAM

**Fuente:** IBM SPSS 25 statistics 25

### ANEXO 3. PRUEBA DE NORMALIDAD TIEMPOS DE RESPUESTA DE LOS MÉTODOS CRUD

Pruebas de normalidad							
	ORM	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Estadístico	gl	Sig.	Estadístico	gl	Sig.
Insertar	Dapper	,435	384	,000	,120	384	,000
	Entity F	,454	384	,000	,093	384	,000
Mostrar	Dapper	,455	384	,000	,157	384	,000
	Entity F	,450	384	,000	,175	384	,000
Actualizar	Dapper	,380	384	,000	,629	384	,000
	Entity F	,430	384	,000	,220	384	,000
Eliminar	Dapper	,235	384	,000	,813	384	,000
	Entity F	,393	384	,000	,198	384	,000

a. Corrección de significación de Lilliefors

**Ilustración 61.** Prueba de Normalidad - Tiempo de respuesta(ms) - Métodos CRUD

**Fuente:** IBM SPSS statistics 25

## UTILIZACIÓN DE RECURSOS

### MÉTODO INSERTAR CON DATOS OBTENIDOS DE JMETER

**Pruebas de normalidad**

	ORM	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Estadístico	gl	Sig.	Estadístico	gl	Sig.
CPU	Dapper	,142	384	,000	,913	384	,000
	Entity F	,148	384	,000	,907	384	,000
Disco	Dapper	,441	384	,000	,535	384	,000
	Entity F	,440	384	,000	,474	384	,000
RAM	Dapper	,248	384	,000	,886	384	,000
	Entity F	,099	384	,000	,955	384	,000

a. Corrección de significación de Lilliefors

**Ilustración 62.** Prueba de Normalidad - utilización de recursos - Método insertar - Herramienta Jmeter

**Fuente:** IBM SPSS statistics 25

### MÉTODO INSERTAR CON DATOS OBTENIDOS MEDIANTE LA LIBRERÍA SYSTEM.DIAGNOSTIC EN EL IDE VISUAL STUDIO

**Pruebas de normalidad**

	ORM	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Estadístico	gl	Sig.	Estadístico	gl	Sig.
CPU	Dapper	,145	384	,000	,917	384	,000
	Entity f	,165	384	,000	,900	384	,000
Disco	Dapper	,279	384	,000	,553	384	,000
	Entity f	,279	384	,000	,616	384	,000
RAM	Dapper	,180	384	,000	,880	384	,000
	Entity f	,175	384	,000	,891	384	,000

a. Corrección de significación de Lilliefors

**Ilustración 63.** Prueba de Normalidad - utilización de recursos - Método insertar - Librería System.Diagnostic en Visual Studio

**Fuente:** IBM SPSS statistics 25

### MÉTODO MOSTRAR CON DATOS OBTENIDOS DE JMETER

**Pruebas de normalidad**

	ORM	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Estadístico	gl	Sig.	Estadístico	gl	Sig.
CPU	Dapper	,140	384	,000	,902	384	,000
	Entity F	,136	384	,000	,899	384	,000
Disco	Dapper	,464	384	,000	,464	384	,000
	Entity F	,504	384	,000	,398	384	,000
RAM	Dapper	,179	384	,000	,865	384	,000
	Entity F	,117	384	,000	,835	384	,000

a. Corrección de significación de Lilliefors

**Ilustración 64.** Prueba de Normalidad - utilización de recursos - Método Mostrar - Herramienta Jmeter

**Fuente:** IBM SPSS statistics 25

## MÉTODO MOSTRAR CON DATOS OBTENIDOS MEDIANTE HERRAMIENTAS DE VISUAL STUDIO

**Pruebas de normalidad**

ORM		Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Estadístico	gl	Sig.	Estadístico	gl	Sig.
CPU	Dapper	,137	384	,000	,908	384	,000
	Entity F	,148	384	,000	,895	384	,000
Disco	Dapper	,281	384	,000	,586	384	,000
	Entity F	,260	384	,000	,629	384	,000
RAM	Dapper	,118	384	,000	,924	384	,000
	Entity F	,135	384	,000	,929	384	,000

a. Corrección de significación de Lilliefors

**Ilustración 65.** Prueba de Normalidad - utilización de recursos - Método Mostrar - Herramienta Jmeter

**Fuente:** IBM SPSS statistics 25

## MÉTODO ACTUALIZAR CON DATOS OBTENIDOS DE JMETER

**Pruebas de normalidad**

ORM		Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Estadístico	gl	Sig.	Estadístico	gl	Sig.
CPU	Dapper	,101	384	,000	,893	384	,000
	Entity F	,096	384	,000	,835	384	,000
Disco	Dapper	,494	384	,000	,425	384	,000
	Entity F	,471	384	,000	,510	384	,000
RAM	Dapper	,167	384	,000	,920	384	,000
	Entity F	,148	384	,000	,898	384	,000

a. Corrección de significación de Lilliefors

**Ilustración 66.** Prueba de Normalidad - utilización de recursos - Método Actualizar - Herramienta Jmeter

**Fuente:** IBM SPSS statistics 25

## MÉTODO ACTUALIZAR CON DATOS OBTENIDOS CON HERRAMIENTAS DE VISUAL STUDIO

**Pruebas de normalidad**

ORM		Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Estadístico	gl	Sig.	Estadístico	gl	Sig.
CPU	Dapper	,112	384	,000	,881	384	,000
	Entity F	,104	384	,000	,842	384	,000
Disco	Dapper	,225	384	,000	,722	384	,000
	Entity F	,254	384	,000	,608	384	,000
RAM	Dapper	,178	384	,000	,883	384	,000
	Entity F	,175	384	,000	,854	384	,000

a. Corrección de significación de Lilliefors

**Ilustración 67.** Prueba de Normalidad - utilización de recursos - Método actualizar - Librería System.Diagnostic en Visual Studio

**Fuente:** IBM SPSS statistics 25

## MÉTODO ELIMINAR CON DATOS OBTENIDO DE JMETER

**Pruebas de normalidad**

ORM		Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Estadístico	gl	Sig.	Estadístico	gl	Sig.
CPU	Dapper	,131	384	,000	,919	384	,000
	Entity F	,144	384	,000	,907	384	,000
Disco	Dapper	,465	384	,000	,392	384	,000
	Entity F	,455	384	,000	,441	384	,000
RAM	Dapper	,169	384	,000	,862	384	,000
	Entity F	,127	384	,000	,938	384	,000

a. Corrección de significación de Lilliefors

**Ilustración 68.** Prueba de Normalidad - utilización de recursos - Método eliminar - Herramienta Jmeter

**Fuente:** IBM SPSS statistics 25

## MÉTODO ELIMINAR CON HERRAMIENTAS DE VISUAL STUDIO

**Pruebas de normalidad**

ORM		Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Estadístico	gl	Sig.	Estadístico	gl	Sig.
CPU	Dapper	,141	384	,000	,915	384	,000
	Entity F	,138	384	,000	,902	384	,000
Disco	Dapper	,284	384	,000	,504	384	,000
	Entity F	,262	384	,000	,651	384	,000
RAM	Dapper	,242	384	,000	,739	384	,000
	Entity F	,154	384	,000	,902	384	,000

a. Corrección de significación de Lilliefors

**Ilustración 69.** Prueba de normalidad - Método Eliminar - Librería System.Diagnostic en Visual Studio

**Fuente:** IBM SPSS statistics 25

## ANEXO 4. PRUEBA U DE MANN WHITNEY – COMPROBACIÓN DE HIPOTESIS TIEMPOS DE RESPUESTA

**Estadísticos de prueba<sup>a</sup>**

	Insertar	Mostrar	Actualizar	Eliminar
U de Mann-Whitney	5642,500	6549,500	5480,000	1345,500
W de Wilcoxon	79562,500	80469,500	79400,000	75265,500
Z	-22,150	-21,859	-22,314	-23,547
Sig. asintótica(bilateral)	,000	,000	,000	,000

a. Variable de agrupación: ORM

**Ilustración 70.** Prueba U de Mann-Whitney Tiempos de respuestas

**Fuente:** IBM SPSS statistics 25

**PRUEBA U DE MANN WHITNEY – UTILIZACIÓN DE RECURSOS – JMETER – INSERTAR**

**Estadísticos de prueba<sup>a</sup>**

	CPU	Disco	RAM
U de Mann-Whitney	62790,000	72493,000	5,000
W de Wilcoxon	136710,000	146413,000	73925,000
Z	-3,558	-,545	-23,983
Sig. asintótica(bilateral)	,000	,586	,000

a. Variable de agrupación: ORM

**Ilustración 71.** Prueba U de Mann Whitney – Utilización de recursos – Jmeter – Insertar  
**Fuente:** IBM SPSS statistics 25

**PRUEBA U DE MANN WHITNEY – UTILIZACIÓN DE RECURSOS – CÓDIGO – INSERTAR**

**Estadísticos de prueba<sup>a</sup>**

	CPU	Disco	RAM
U de Mann-Whitney	62328,000	68340,000	,000
W de Wilcoxon	136248,000	142260,000	73920,000
Z	-3,709	-1,753	-23,984
Sig. asintótica(bilateral)	,000	,080	,000

a. Variable de agrupación: ORM

**Ilustración 72.** Prueba U de Mann Whitney – Utilización de recursos – Código – Insertar  
**Fuente:** IBM SPSS statistics 25

**PRUEBA U DE MANN WHITNEY – UTILIZACIÓN DE RECURSOS – JMETER – MOSTRAR**

**Estadísticos de prueba<sup>a</sup>**

	CPU	Disco	RAM
U de Mann-Whitney	69859,000	69318,000	41473,500
W de Wilcoxon	143779,000	143238,000	115393,500
Z	-1,259	-2,235	-10,493
Sig. asintótica(bilateral)	,208	,025	,000

a. Variable de agrupación: ORM

**Ilustración 73.** Prueba U de Mann Whitney – Utilización de recursos – JMeter – Mostrar  
**Fuente:** IBM SPSS statistics 25



**PRUEBA U DE MANN WHITNEY – UTILIZACIÓN DE RECURSOS – CÓDIGO – MOSTRAR**

**Estadísticos de prueba<sup>a</sup>**

	CPU	Disco	RAM
U de Mann-Whitney	69345,500	69196,000	17870,000
W de Wilcoxon	143265,500	143116,000	91790,000
Z	-1,426	-1,475	-18,171
Sig. asintótica(bilateral)	,154	,140	,000

a. Variable de agrupación: ORM

**Ilustración 74.** Prueba U de Mann Whitney – Utilización de recursos – Código – Mostrar  
**Fuente:** IBM SPSS statistics 25

**PRUEBA U DE MANN WHITNEY – UTILIZACIÓN DE RECURSOS – JMETER – ACTUALIZAR**

**Estadísticos de prueba<sup>a</sup>**

	CPU	Disco	RAM
U de Mann-Whitney	61751,000	69820,500	3455,000
W de Wilcoxon	135671,000	143740,500	77375,000
Z	-3,896	-1,910	-22,861
Sig. asintótica(bilateral)	,000	,056	,000

a. Variable de agrupación: ORM

**Ilustración 75.** Prueba U de Mann Whitney – Utilización de recursos – JMeter – Actualizar  
**Fuente:** IBM SPSS statistics 25

**PRUEBA U DE MANN WHITNEY – UTILIZACIÓN DE RECURSOS – CÓDIGO – ACTUALIZAR**

**Estadísticos de prueba<sup>a</sup>**

	CPU	Disco	RAM
U de Mann-Whitney	63363,000	72094,500	4022,500
W de Wilcoxon	137283,000	146014,500	77942,500
Z	-3,372	-,531	-22,676
Sig. asintótica(bilateral)	,001	,595	,000

a. Variable de agrupación: ORM

**Ilustración 76.** Prueba U de Mann Whitney – Utilización de recursos – Código – Actualizar  
**Fuente:** IBM SPSS statistics 25

**PRUEBA U DE MANN WHITNEY – UTILIZACIÓN DE RECURSOS – JMETER – ELIMINAR**

**Estadísticos de prueba<sup>a</sup>**

	CPU	Disco	RAM
U de Mann-Whitney	69063,500	71948,500	47465,000
W de Wilcoxon	142983,500	145868,500	121385,000
Z	-1,517	-,859	-8,544
Sig. asintótica(bilateral)	,129	,390	,000

a. Variable de agrupación: ORM

**Ilustración 77.** Prueba U de Mann Whitney – Utilización de recursos – JMeter – Eliminar  
**Fuente:** IBM SPSS statistics 25

**Prueba U de Mann Whitney – Utilización de recursos – Código – Eliminar**

**Estadísticos de prueba<sup>a</sup>**

	CPU	Disco	RAM
U de Mann-Whitney	69595,500	72838,500	17681,000
W de Wilcoxon	143515,500	146758,500	91601,000
Z	-1,344	-,289	-18,233
Sig. asintótica(bilateral)	,179	,772	,000

a. Variable de agrupación: ORM

**Ilustración 78.** Prueba U de Mann Whitney – Utilización de recursos – Código – Eliminar  
**Fuente:** IBM SPSS statistics 25