**LAPORAN TUGAS**

**PEMROGRAMAN BASIS DATA**



Disusun Oleh:

**Mohamad Aditya Muttaqin Ghozali Helmy Fauzan Wahyudiputra**

NIM. 3411 20 1006 NIM. 3411 20 1013

**Rizza Nur Firmansyah**

NIM. 3411 20 1023

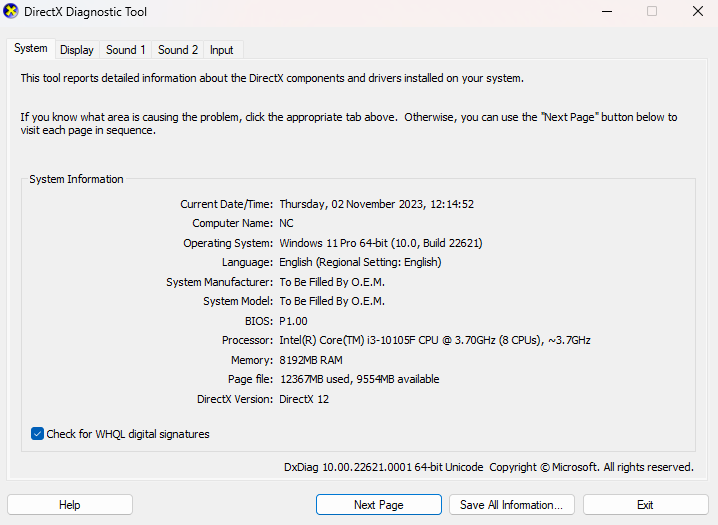
**PROGRAM STUDI INFORMATIKA  
FAKULTAS SAINS DAN INFORMATIKA  
UNIVERSITAS JENDERAL ACHMAD YANI  
2023**

Nama: Mohamad Aditya Muttaqin Ghozali

Nim: 3411201006

Kelas: DSE-A

1. Spesifikasi Device

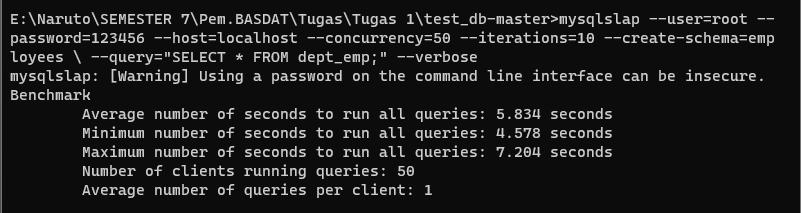


1. Benchmarking
2. Syntax Bencmarking Custom Queries

* Syntax

|  |
| --- |
| mysqlslap --user=root --password=123456 --host=localhost --concurrency=50 --iterations=10 --create-schema=employees \ --query="SELECT \* FROM dept\_emp;" --verbose |

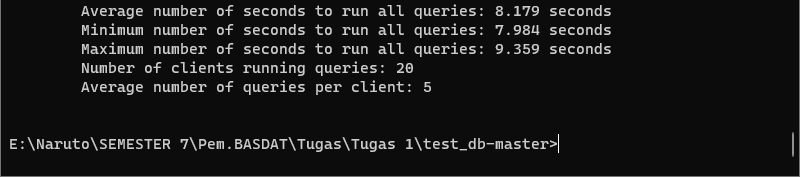
* Hasil



* Syntax

|  |
| --- |
| mysqlslap --user=root --password=123456 --host=localhost --concurrency=20 --iterations=10 --create-schema=employees \ --query="SELECT \* FROM employees;SELECT \* FROM titles;SELECT \* FROM dept\_emp;SELECT \* FROM dept\_manager; \ SELECT \* FROM departements;" --delimiter=";" --verbose |

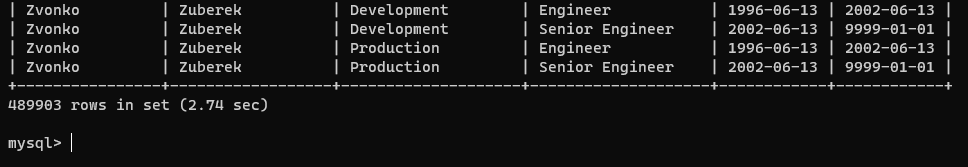
* Hasil



* Syntax

|  |
| --- |
| SELECT e.first\_name, e.last\_name, d.dept\_name, t.title, t.from\_date, t.to\_date FROM employees e INNER JOIN dept\_emp de ON e.emp\_no=de.emp\_no INNER JOIN departments d ON de.dept\_no=d.dept\_no INNER JOIN titles t ON e.emp\_no=t.emp\_no ORDER BY e.first\_name, e.last\_name, d.dept\_name, t.from\_date; |

* Hasil

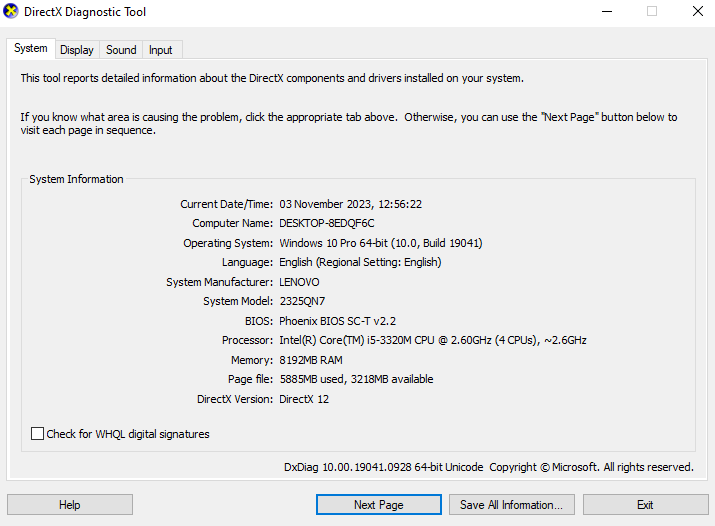


Nama : Helmy Fauzan Wahyudiputra

NIM : 3411201013

Kelas : DSE – A

1. Spesifikasi

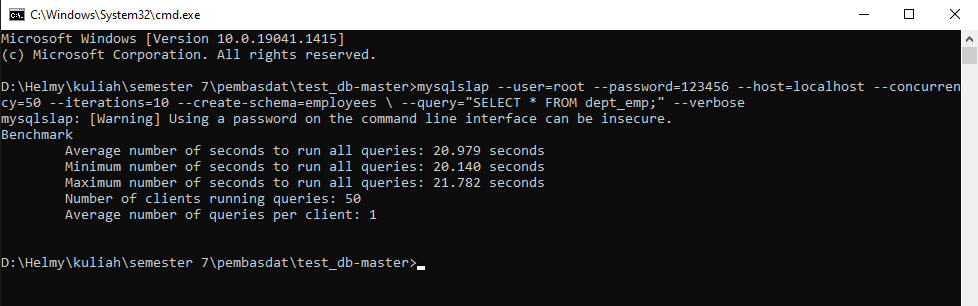


1. Benchmarking

* Syntak

|  |
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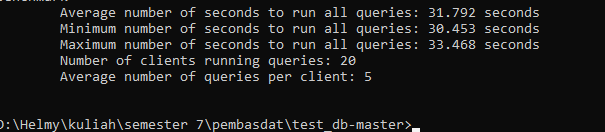
* Screenshot



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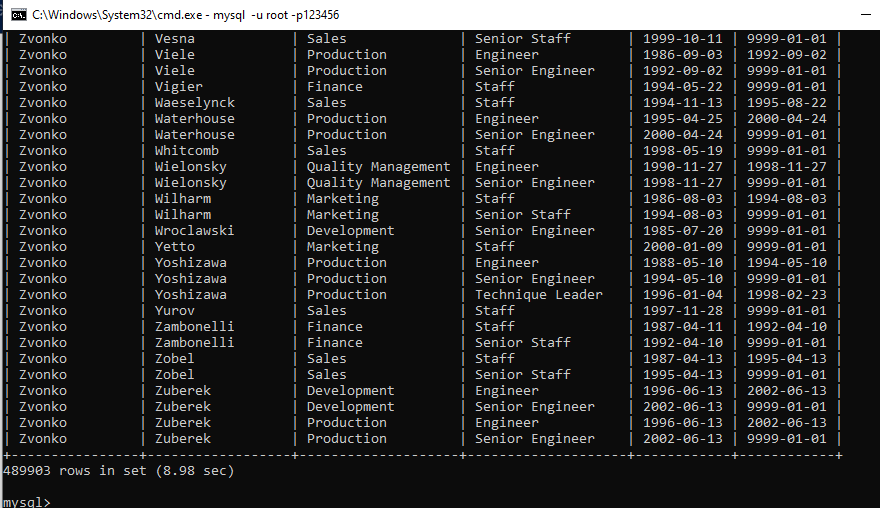
* Screenshot



* Syntak

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| --- |
| SELECT e.first\_name, e.last\_name, d.dept\_name, t.title, t.from\_date, t.to\_date FROM employees e INNER JOIN dept\_emp de ON e.emp\_no=de.emp\_no INNER JOIN departments d ON de.dept\_no=d.dept\_no INNER JOIN titles t ON e.emp\_no=t.emp\_no ORDER BY e.first\_name, e.last\_name, d.dept\_name, t.from\_date; |

* Screenshot

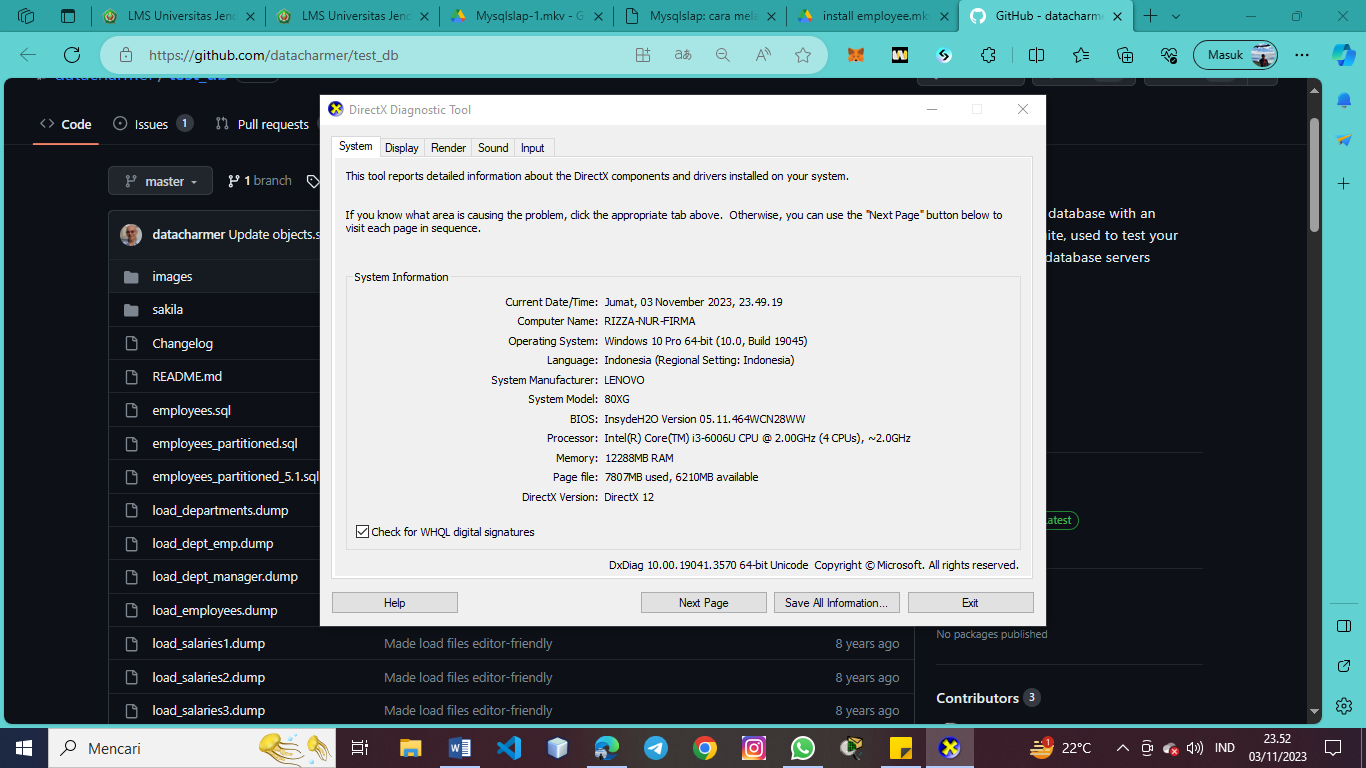


Nama : Rizza Nur Firmansyah

NIM : 3411201023

Kelas : DSE – A

1. Spesifikasi

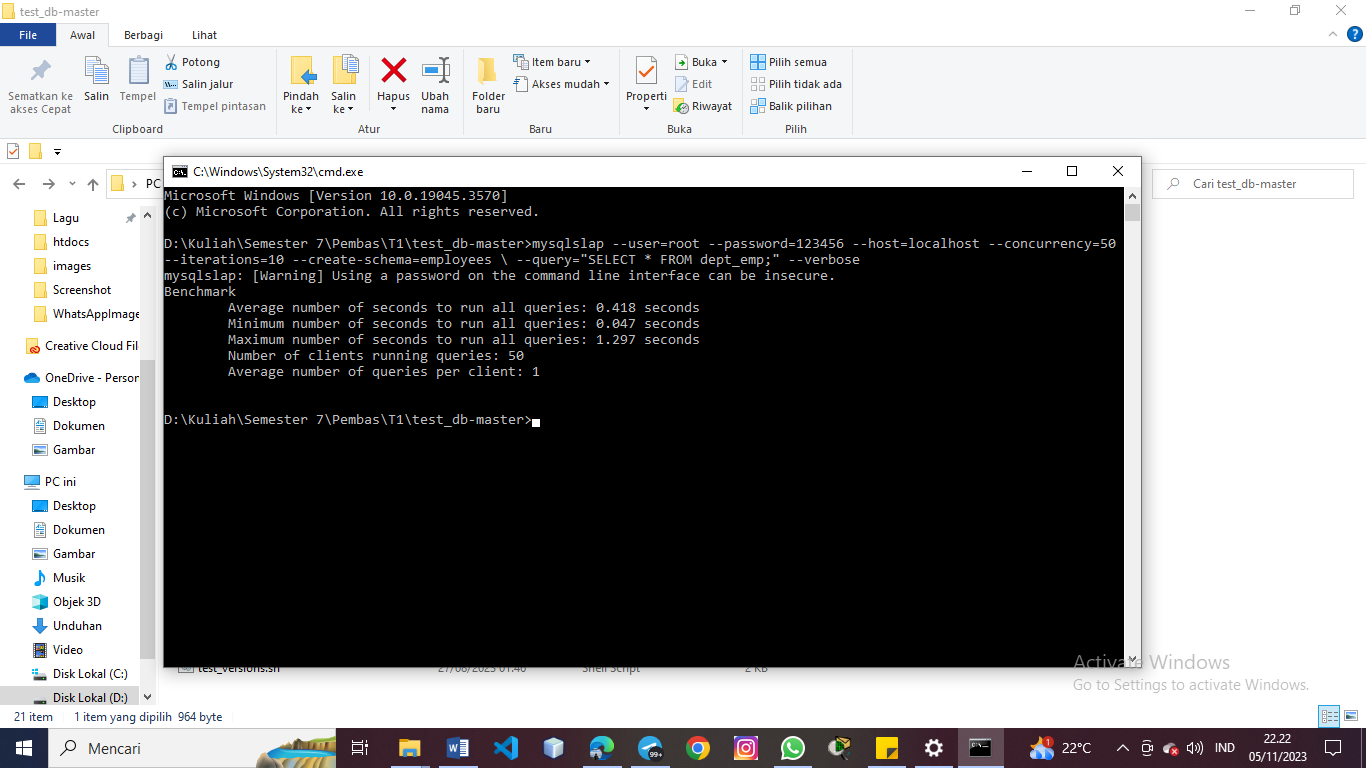


1. Benchmarking

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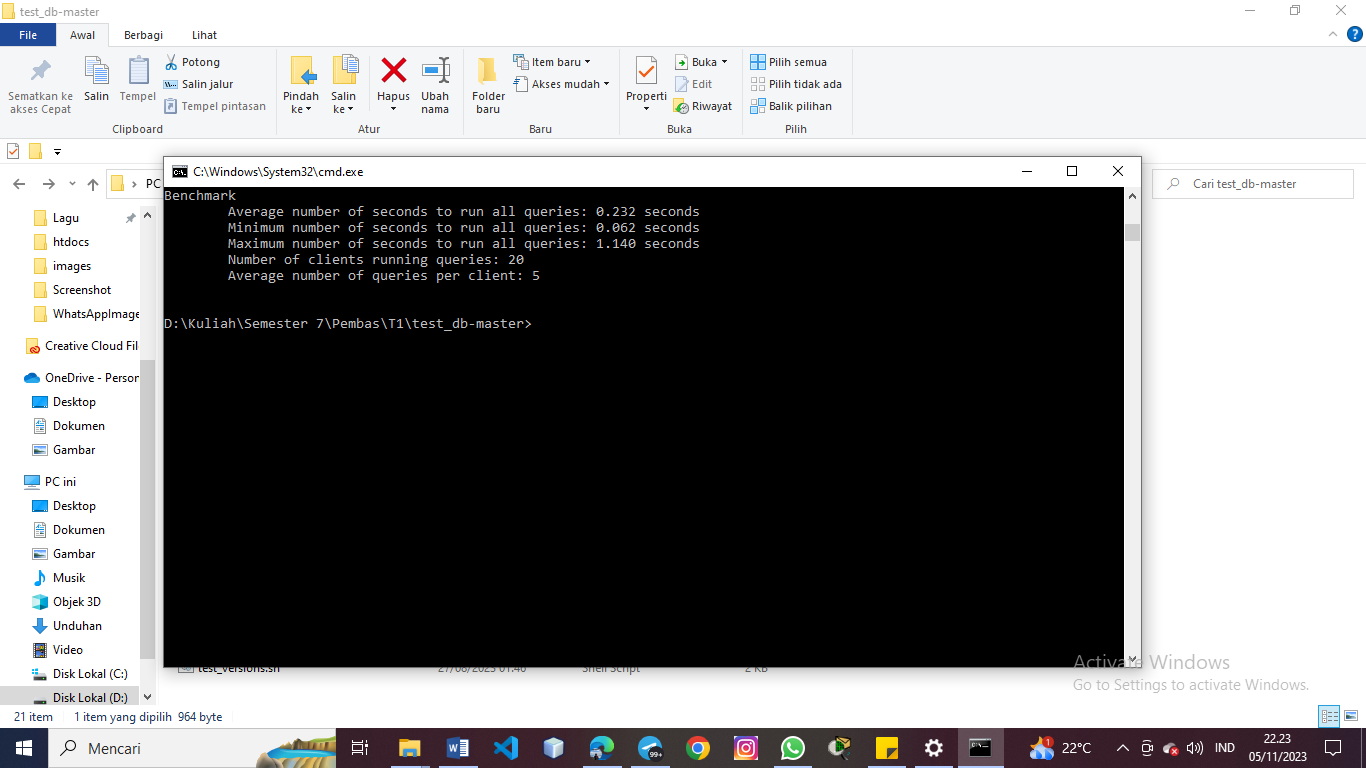
* Screenshot



* Syntak

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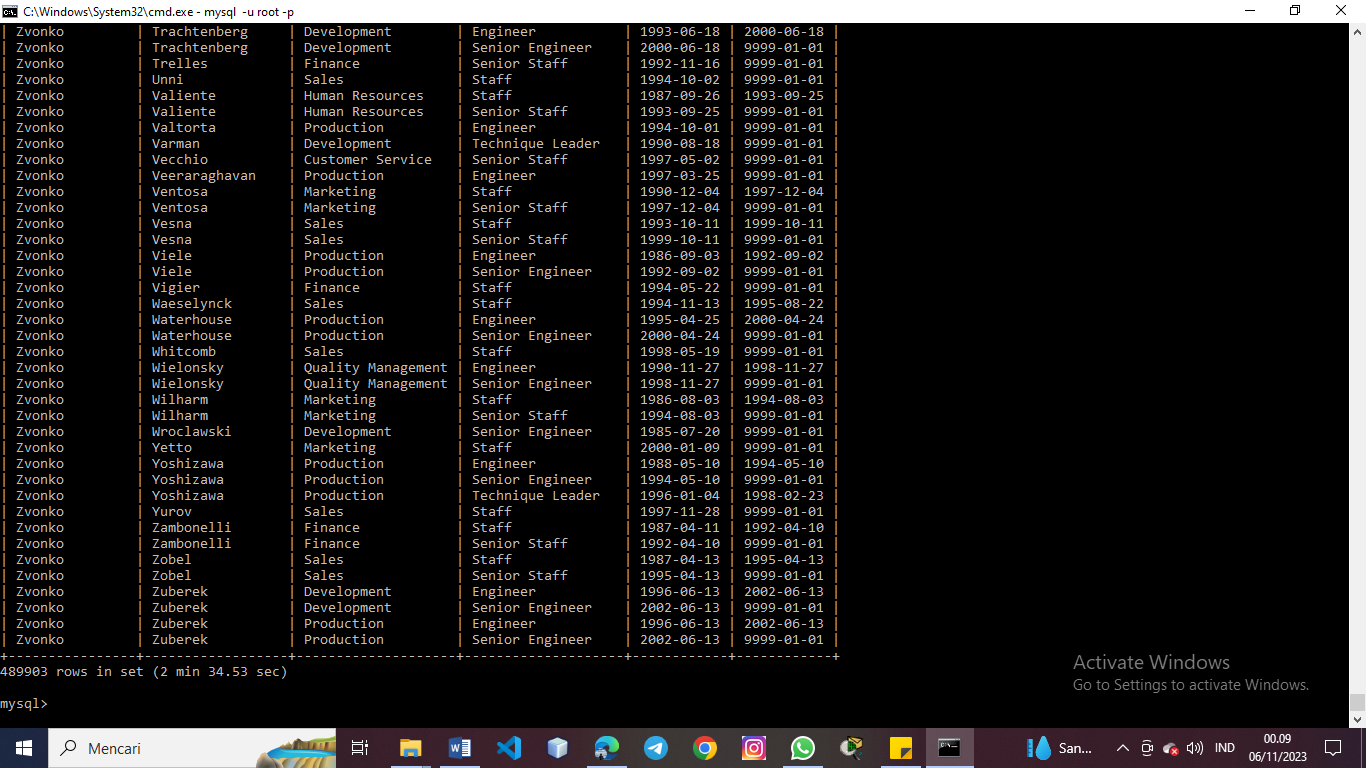
* Screenshot



* Syntak

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| SELECT e.first\_name, e.last\_name, d.dept\_name, t.title, t.from\_date, t.to\_date FROM employees e INNER JOIN dept\_emp de ON e.emp\_no=de.emp\_no INNER JOIN departments d ON de.dept\_no=d.dept\_no INNER JOIN titles t ON e.emp\_no=t.emp\_no ORDER BY e.first\_name, e.last\_name, d.dept\_name, t.from\_date; |

* Screenshot



* Analisis

Benchmarking ini digunakan untuk melakukan proses perbandingan kinerja, praktik, atau proses suatu organisasi dengan organisasi lainnya. Bencmarking ini juga dapat mengidentifikasi kelemahan dan peluangperbaikan dalam oeprasinya. Dalam kasus diatas dilakukan pengujian benchmarking pada dua device yang berbeda, dan setiap hasil dari device yang berbeda memiliki waktu proses query yang berbeda. Sehingga waktu proses query ini ditentukan juga oleh spesifikasi yang digunakan. Setiap pengujian dilakukan menggunakan jumlah data set yang berbeda-beda, sehingga waktu yang diperoleh akan berbeda-beda dan juga sesuai dengan spesifikasi yang digunakan.