

# **QUERY DDL, DML, DCL, TCL**



Disusun Oleh :

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**PROGRAM STUDI METODOLOGI DESAIN PERANGKAT LUNAK**

**PRAKTIK**

**FAKULTAS SAINS DAN TEKNOLOGI**

**UNIVERSITAS TEKNOLOGI YOGYAKARTA**

**YOGYAKARTA**

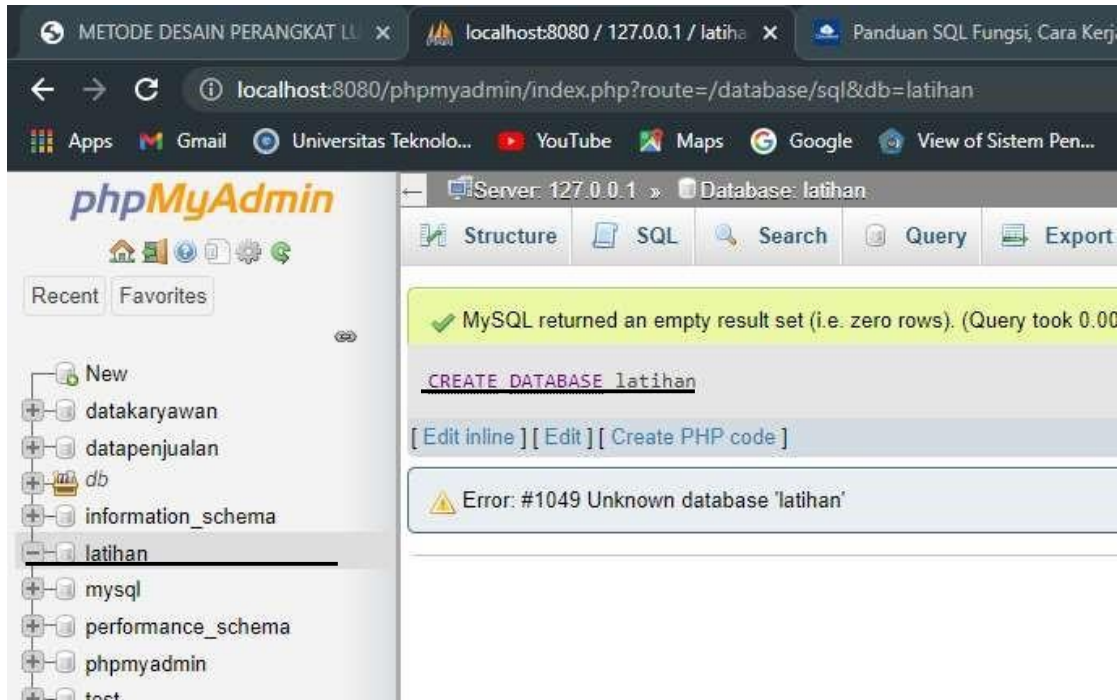
**2021**

# 1 DATA DEFINITION LANGUAGE / DDL

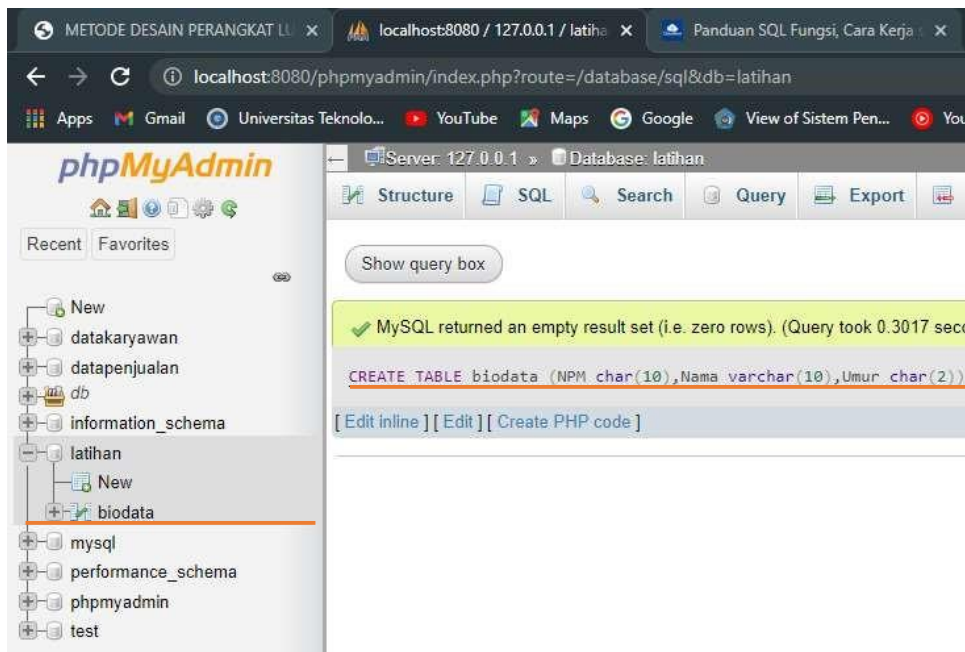
Nama : Rusli Pramono

NPM : 5200411417

## 1.1 CREATE DATABASE

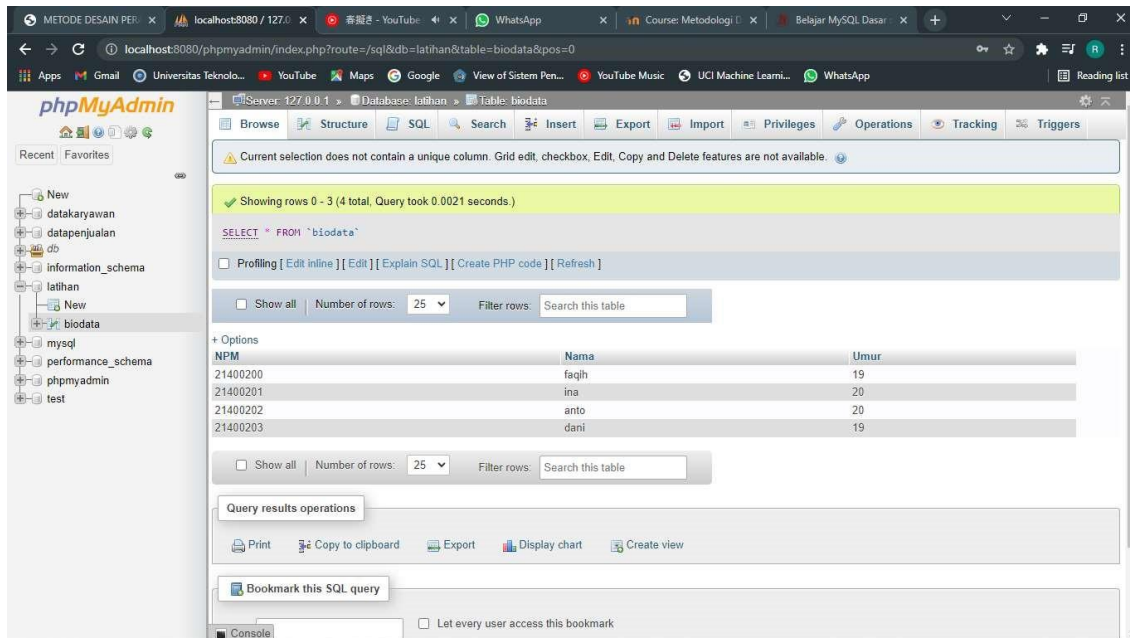


## 1.2 CREATE TABLE





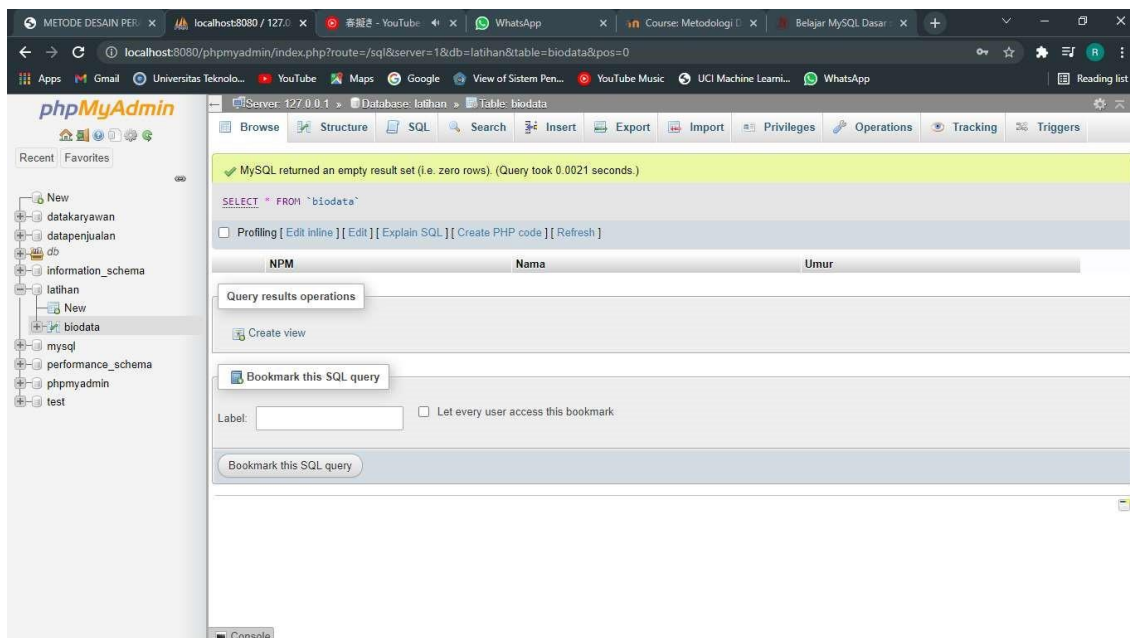
## 1.6 TRUNCATE



The screenshot shows the phpMyAdmin interface for a database named 'latihan'. The 'biodata' table is selected, and the SQL tab is active. The query 'SELECT \* FROM `biodata`' is entered, and the results show 4 rows. The table structure is as follows:

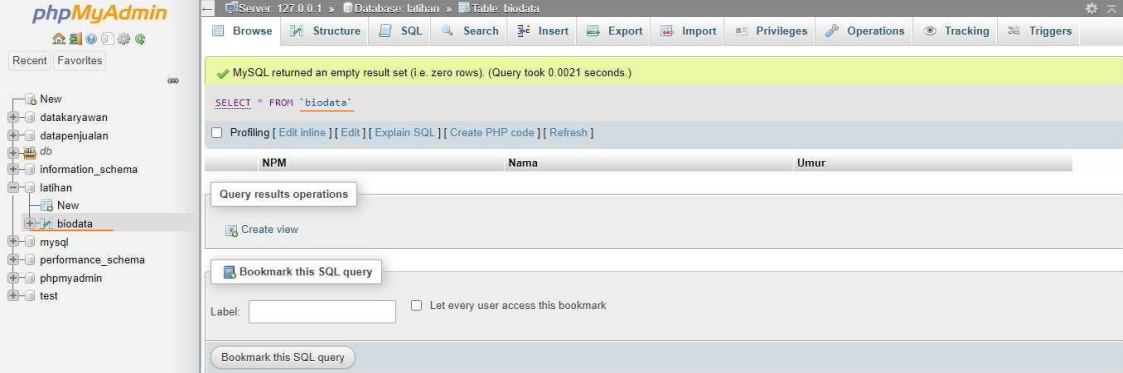
| NPM      | Nama  | Umur |
|----------|-------|------|
| 21400200 | faqlh | 19   |
| 21400201 | ina   | 20   |
| 21400202 | anto  | 20   |
| 21400203 | dani  | 19   |

TRUNCATE TABLE biodata



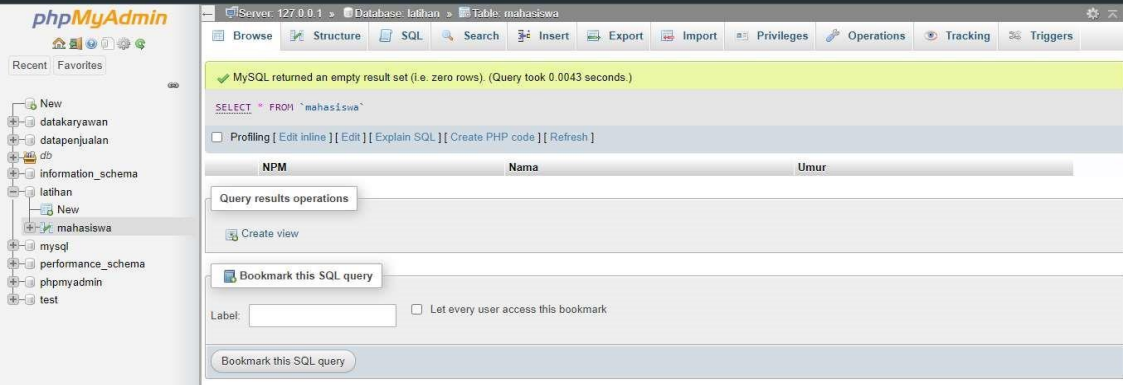
The screenshot shows the phpMyAdmin interface after the 'TRUNCATE TABLE biodata' command has been executed. The SQL tab is active, and the query 'SELECT \* FROM `biodata`' is entered. The results show an empty result set, indicating that all data has been removed from the table.

## 1.7 RENAME



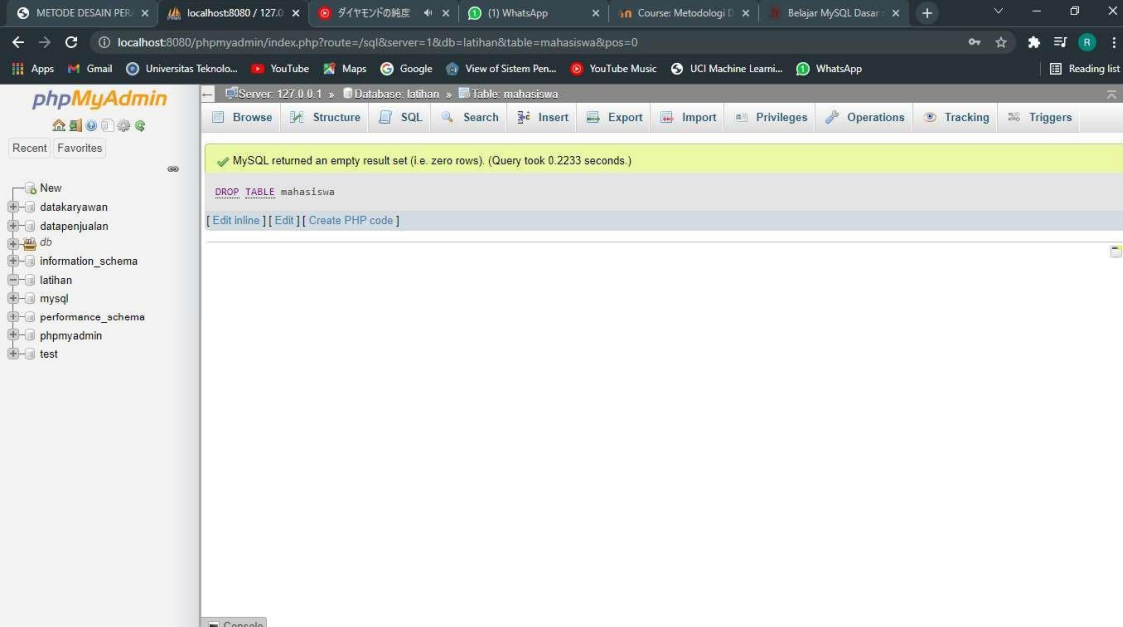
The screenshot shows the phpMyAdmin interface for a database named 'latihan'. The 'biodata' table is selected. The table structure is displayed with columns: NPM, Nama, and Umur. The query results show an empty result set. The SQL query entered is `SELECT * FROM `biodata``. The interface includes a sidebar with a tree view of databases and tables, and a top menu with options like Browse, Structure, SQL, Search, Insert, Export, Import, Privileges, Operations, Tracking, and Triggers.

```
RENAME TABLE biodata TO mahasiswa
```



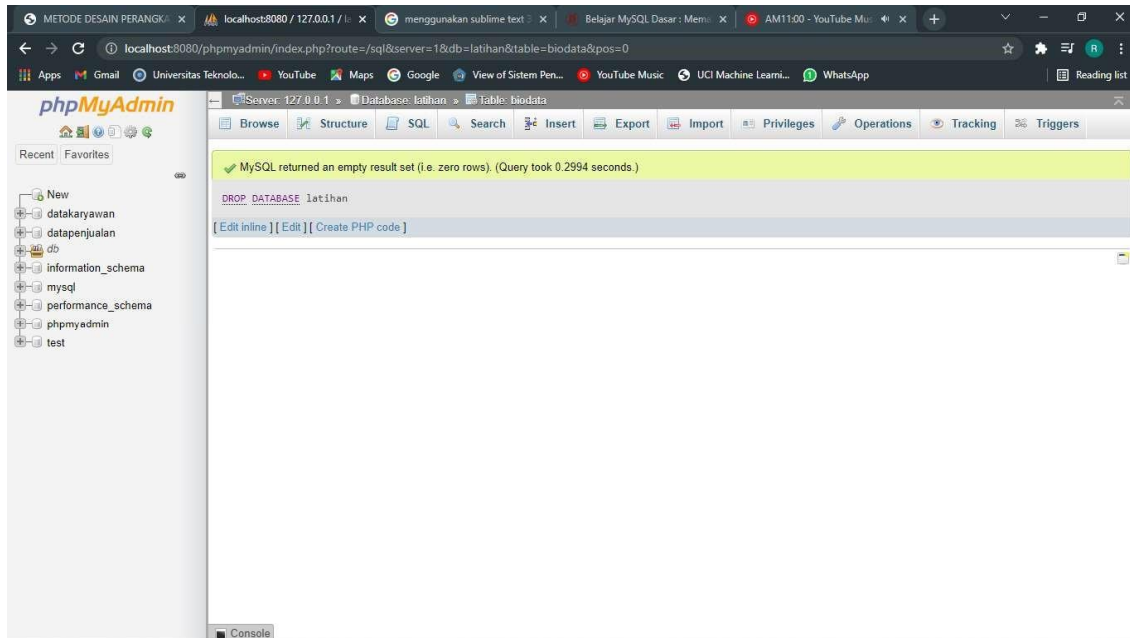
The screenshot shows the phpMyAdmin interface after the RENAME operation. The table 'biodata' has been renamed to 'mahasiswa'. The table structure is displayed with columns: NPM, Nama, and Umur. The query results show an empty result set. The SQL query entered is `SELECT * FROM `mahasiswa``. The interface includes a sidebar with a tree view of databases and tables, and a top menu with options like Browse, Structure, SQL, Search, Insert, Export, Import, Privileges, Operations, Tracking, and Triggers.

## 1.8 DROP TABLE



The screenshot shows the phpMyAdmin interface with the 'mahasiswa' table selected. The SQL query entered is `DROP TABLE mahasiswa`. The query results show an empty result set. The interface includes a sidebar with a tree view of databases and tables, and a top menu with options like Browse, Structure, SQL, Search, Insert, Export, Import, Privileges, Operations, Tracking, and Triggers. The browser's address bar shows the URL: `localhost:8080/phpmyadmin/index.php?route=/sql&server=1&db=latihan&table=mahasiswa&pos=0`.

## 1.9 DROP DATABASE



## 2 DATA MANIPULATION LANGUAGE / DML

Nama : Pramudea Yohano Firmansyah

NPM : 5200411409

| kode_pegawai | nama_pegawai | username  | password  |
|--------------|--------------|-----------|-----------|
| KP01         | Sujatmiko    | jtmk123   | 123jtmk   |
| KP02         | Sukemi       | sukemi123 | 123sukemi |

### 2.1 SELECT

```
SELECT * FROM `tb_pegawai` WHERE kode_pegawai = "KP01"
```

| kode_pegawai | nama_pegawai | username | password |
|--------------|--------------|----------|----------|
| KP01         | Sujatmiko    | jtmk123  | 123jtmk  |

### 2.2 INSERT

```
INSERT INTO tb_pegawai (kode_pegawai, nama_pegawai, username, password) VALUES ("KP03", "Rayjin", "rayjin123", "123rayjin")
```

| kode_pegawai | nama_pegawai | username  | password  |
|--------------|--------------|-----------|-----------|
| KP01         | Sujatmiko    | jtmk123   | 123jtmk   |
| KP02         | Sukemi       | sukemi123 | 123sukemi |
| KP03         | Rayjin       | rayjin123 | 123rayjin |

### 2.3 UPDATE

```
UPDATE tb_pegawai SET username = 'rayjinyy' WHERE kode_pegawai = 'KP03'
```

|      |        |          |           |
|------|--------|----------|-----------|
| KP03 | Rayjin | rayjinyy | 123rayjin |
|------|--------|----------|-----------|

### 2.4 DELETE

```
DELETE FROM tb_pegawai WHERE kode_pegawai = 'KP03'
```

| kode_pegawai | nama_pegawai | username  | password  |
|--------------|--------------|-----------|-----------|
| KP01         | Sujatmiko    | jtmk123   | 123jtmk   |
| KP02         | Sukemi       | sukemi123 | 123sukemi |



### 3 DATA CONTROL LANGUAGE

Nama : Muhammad Ilham Triwibowo

NPM : 5200411416

Commit, Rollback dan Save Point merupakan fungsi yang digunakan untuk melakukan restore data ke kondisi awal sebelum dilakukan perubahan data. Berikut adalah basic demonstrasi dari Commit, Rollback dan Save Point di SQL:

#### 3.1 GRANT

✓ MySQL returned an empty result set (i.e. zero rows). (Query took 0.0006 seconds.)

```
1 GRANT ALL PRIVILEGES ON *.* TO 'asus'@'%'
```

☒ Enable foreign key checks

Edit privileges: User account 'asus'@'%'

Global privileges ☒ Check all

*Note: MySQL privilege names are expressed in English.*

|  |   |  |  |
|--|---|--|--|
| <input checked="" type="checkbox"/> <b>Data</b> <ul style="list-style-type: none"><li><input checked="" type="checkbox"/> SELECT</li><li><input checked="" type="checkbox"/> INSERT</li><li><input checked="" type="checkbox"/> UPDATE</li><li><input checked="" type="checkbox"/> DELETE</li><li><input checked="" type="checkbox"/> FILE</li></ul> | <input checked="" type="checkbox"/> <b>Structure</b> <ul style="list-style-type: none"><li><input checked="" type="checkbox"/> CREATE</li><li><input checked="" type="checkbox"/> ALTER</li><li><input checked="" type="checkbox"/> INDEX</li><li><input checked="" type="checkbox"/> DROP</li><li><input checked="" type="checkbox"/> CREATE TEMPORARY TABLES</li><li><input checked="" type="checkbox"/> SHOW VIEW</li><li><input checked="" type="checkbox"/> CREATE ROUTINE</li><li><input checked="" type="checkbox"/> ALTER ROUTINE</li><li><input checked="" type="checkbox"/> EXECUTE</li><li><input checked="" type="checkbox"/> CREATE VIEW</li><li><input checked="" type="checkbox"/> EVENT</li><li><input checked="" type="checkbox"/> TRIGGER</li></ul> | <input checked="" type="checkbox"/> <b>Administration</b> <ul style="list-style-type: none"><li><input checked="" type="checkbox"/> GRANT</li><li><input checked="" type="checkbox"/> SUPER</li><li><input checked="" type="checkbox"/> PROCESS</li><li><input checked="" type="checkbox"/> RELOAD</li><li><input checked="" type="checkbox"/> SHUTDOWN</li><li><input checked="" type="checkbox"/> SHOW DATABASES</li><li><input checked="" type="checkbox"/> LOCK TABLES</li><li><input checked="" type="checkbox"/> REFERENCES</li><li><input checked="" type="checkbox"/> REPLICATION CLIENT</li><li><input checked="" type="checkbox"/> REPLICATION SLAVE</li><li><input checked="" type="checkbox"/> CREATE USER</li></ul> | <input type="checkbox"/> <b>Resource limits</b> <p><i>Note: Setting these options to 0 (zero) removes the limit.</i></p> <p>MAX QUERIES PER HOUR <input type="text" value="0"/></p> <p>MAX UPDATES PER HOUR <input type="text" value="0"/></p> <p>MAX CONNECTIONS PER HOUR <input type="text" value="0"/></p> <p>MAX USER_CONNECTIONS <input type="text" value="0"/></p> |
|--|---|--|--|

GRANT ALL PREVLILAGES ON \*.\* TO 'asus'@'%' ;



Perintah Grant digunakan untuk memberikan hak akses khusus kepada user untuk melakukan aksi tertentu pada object tertentu di database.

### 3.2 REVOKE

The screenshot displays a MySQL management tool interface. At the top, a header bar reads "Run SQL query/queries on server '127.0.0.1':". Below this, a text area contains a SQL query: `1 REVOKE ALL PRIVILEGES ON *.* FROM 'asus'@'%'`. The query is highlighted with a red squiggly line under the word "REVOKE". Below the query area are three buttons: "Clear", "Format", and "Get auto-saved query".

Below the query area, the interface shows the "Edit privileges: User account 'asus'@'%" section. It includes a "Global privileges" tab and a "Check all" button. A note states: "Note: MySQL privilege names are expressed in English." The interface is divided into four main sections:

- Data**: Contains checkboxes for SELECT, INSERT, UPDATE, DELETE, and FILE.
- Structure**: Contains checkboxes for CREATE, ALTER, INDEX, DROP, CREATE TEMPORARY TABLES, SHOW VIEW, CREATE ROUTINE, ALTER ROUTINE, EXECUTE, CREATE VIEW, EVENT, and TRIGGER.
- Administration**: Contains checkboxes for GRANT (checked), SUPER, PROCESS, RELOAD, SHUTDOWN, SHOW DATABASES, LOCK TABLES, REFERENCES, REPLICATION CLIENT, REPLICATION SLAVE, and CREATE USER.
- Resource limits**: Contains a note "Note: Setting these options to 0 (zero) removes the limit." and four input fields: MAX QUERIES PER HOUR (0), MAX UPDATES PER HOUR (0), MAX CONNECTIONS PER HOUR (0), and MAX USER\_CONNECTIONS (0).

REVOKE ALL PREVILAGES ON \*.\* FROM 'asus'@'%';

Perintah Revoke digunakan untuk menarik kembali / mencabut / membatalkan hak akses khusus yang sebelumnya telah diberikan melalui perintah *Grant*.

## 4 TRANSACTION CONTROL LANGUAGE

Nama : Dwi Muhammad Faza

NPM : 5200411332

### 4.1 COMMIT

```
1 INSERT INTO mahasiswa
2 VALUES
3 (21400200,"faqih","bandung"),
4 (21400201,"ina","jakarta"),
5 (21400202,"anto","semarang"),
6 (21400203,"dani","padang");
```

Selanjutnya kita cek data yang telah diinputkan

```
1 > SELECT * FROM mahasiswa;
2 +-----+-----+-----+
3 | nim      | nama  | alamat |
4 +-----+-----+-----+
5 | 21400200 | faqih | bandung |
6 | 21400201 | ina   | jakarta |
7 | 21400202 | anto  | semarang |
8 | 21400203 | dani  | padang  |
9 +-----+-----+-----+
10 4 rows in set (0.00 sec)
```

```
START TRANSACTION;
```

```
1 > START TRANSACTION;
2 Query OK, 0 rows affected (0.00 sec)
3
4 > INSERT INTO mahasiswa VALUES (21400210,"Jaka","Kalimantan");
5 Query OK, 1 row affected (0.00 sec)
6
7 > COMMIT;
8 Query OK, 0 rows affected (0.07 sec)
9
10 > SELECT * FROM mahasiswa;
11 +-----+-----+-----+
12 | nim      | nama  | alamat  |
13 +-----+-----+-----+
14 | 21400200 | faqih | bandung  |
15 | 21400201 | ina   | jakarta  |
16 | 21400202 | anto  | semarang |
17 | 21400203 | dani  | padang   |
18 | 21400210 | Jaka  | Kalimantan |
19 +-----+-----+-----+
20 5 rows in set (0.00 sec)
21
```

## 4.2 PERINTAH ROLLBACK

```
1 > START TRANSACTION;
2 Query OK, 0 rows affected (0.00 sec)
3
4 > SELECT * FROM mahasiswa;
5 +-----+-----+-----+
6 | nim      | nama  | alamat  |
7 +-----+-----+-----+
8 | 21400200 | faqih | bandung  |
9 | 21400201 | ina   | jakarta  |
10 | 21400202 | anto  | semarang |
11 | 21400203 | dani  | padang   |
12 | 21400210 | Jaka  | Kalimantan |
13 +-----+-----+-----+
14 5 rows in set (0.00 sec)
15
16 > INSERT INTO mahasiswa VALUES (21400211,"Fitri","Surabaya");
17 Query OK, 1 row affected (0.00 sec)
18
```

```

18
19 > SELECT * FROM mahasiswa;
20 +-----+-----+-----+
21 | nim      | nama  | alamat  |
22 +-----+-----+-----+
23 | 21400200 | faqih | bandung |
24 | 21400201 | ina   | jakarta |
25 | 21400202 | anto  | semarang |
26 | 21400203 | dani  | padang  |
27 | 21400210 | Jaka  | Kalimantan |
28 | 21400211 | Fitri | Surabaya |
29 +-----+-----+-----+
30 6 rows in set (0.00 sec)
31
32 > ROLLBACK;
33 Query OK, 0 rows affected (0.11 sec)
34
35 > SELECT * FROM mahasiswa;
36 +-----+-----+-----+
37 | nim      | nama  | alamat  |
38 +-----+-----+-----+
39 | 21400200 | faqih | bandung |
40 | 21400201 | ina   | jakarta |
41 | 21400202 | anto  | semarang |
42 | 21400203 | dani  | padang  |
43 | 21400210 | Jaka  | Kalimantan |
44 +-----+-----+-----+
45 5 rows in set (0.00 sec)
46

```