

Praktikum Basis Data

Modul 4

Nama : Edi Supriyanto

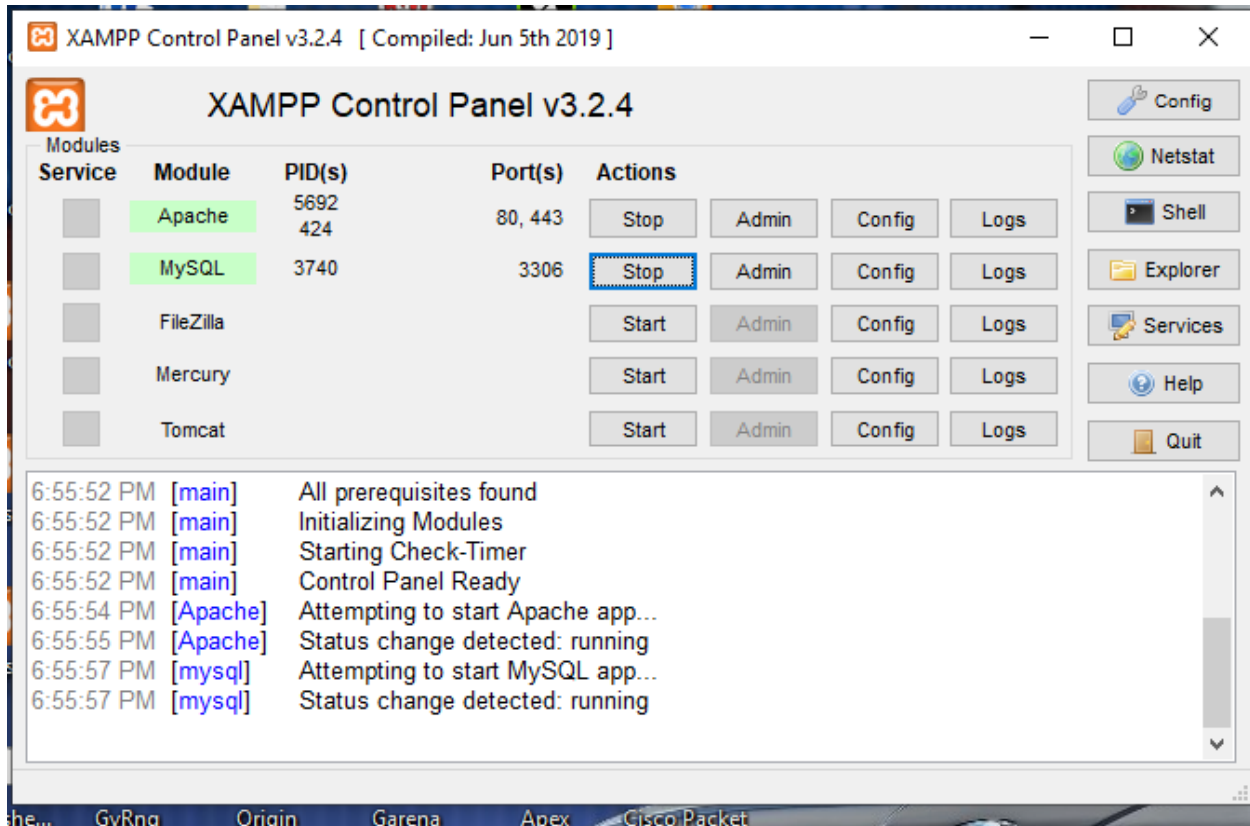
NIM : L200180002

Kelas : A

Langkah-langkah Praktikum

Menjalankan XAMPP

menStart Server Apache dan MySQL



Membuka MySQL lewat Command Prompt

```
C:\>cd xampp\mysql\bin

C:\xampp\mysql\bin>mysql -u root -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 22
Server version: 10.4.11-MariaDB mariadb.org binary distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.
```

Membuat database baru

```
MariaDB [(none)]> create database perbankan;  
Query OK, 1 row affected (0.010 sec)
```

Menghubungkan kedalam database yang baru kita buat

```
MariaDB [perbankan]> use perbankan;  
Database changed  
MariaDB [perbankan]>
```

Membuat tabel nasabah

```
MariaDB [perbankan]> CREATE TABLE nasabah(  
-> id_nasabah INTEGER PRIMARY KEY,  
-> nama_nasabah VARCHAR(45) NOT NULL,  
-> alamat_nasabah VARCHAR(255) NOT NULL  
-> );  
Query OK, 0 rows affected (0.213 sec)
```

```
MariaDB [perbankan]>
```

Membuat tabel cabang_bank

```
MariaDB [perbankan]> CREATE TABLE cabang_bank(  
-> kode_cabang VARCHAR(20) PRIMARY KEY,  
-> nama_cabang VARCHAR(45) UNIQUE NOT NULL,  
-> alamat_cabang VARCHAR(255) NOT NULL  
-> );  
Query OK, 0 rows affected (0.215 sec)
```

```
MariaDB [perbankan]>
```

Membuat tabel rekening

```
MariaDB [perbankan]> CREATE TABLE rekening(  
-> no_rekening INTEGER PRIMARY KEY,  
-> kode_cabangFK VARCHAR(20) REFERENCES cabang_bank(kode_cabang) ON DELETE CASCADE ON UPDATE CASCADE,  
-> pin VARCHAR(20) DEFAULT '1234' NOT NULL,  
-> saldo INTEGER DEFAULT 0 NOT NULL  
-> );  
Query OK, 0 rows affected (0.217 sec)
```

```
MariaDB [perbankan]>
```

Membuat tabel transaksi

```
MariaDB [perbankan]> CREATE TABLE transaksi(  
-> no_transaksi SERIAL PRIMARY KEY,  
-> id_nasabahFK INTEGER REFERENCES nasabah(id_nasabah) ON DELETE SET NULL ON UPDATE CASCADE,  
-> no_rekeningFK INTEGER REFERENCES rekening(no_rekening) ON DELETE SET NULL ON UPDATE CASCADE,  
-> jenis_transaksi VARCHAR(20) DEFAULT 'debit' NOT NULL,  
-> tanggal DATETIME NOT NULL DEFAULT CURRENT_TIMESTAMP,  
-> jumlah INTEGER NOT NULL CHECK(jumlah>=20000)  
-> );  
Query OK, 0 rows affected (0.182 sec)
```

```
MariaDB [perbankan]>
```

Membuat tabel nasabah_has_rekening

```
MariaDB [perbankan]> CREATE TABLE nasabah_has_rekening(
  -> id_nasabahFK INTEGER REFERENCES nasabah(id_nasabah) ON DELETE CASCADE ON UPDATE CASCADE,
  -> no_rekeningFK INTEGER REFERENCES rekening(no_rekening) ON DELETE CASCADE ON UPDATE CASCADE,
  -> PRIMARY KEY(id_nasabahFK,no_rekeningFK)
  -> );
Query OK, 0 rows affected (0.174 sec)
```

```
MariaDB [perbankan]>
```

Cek hasil pembuatan database dengan perintah 'show tables;' dan untuk melihat struktur tiap tabel menggunakan perintah 'describe nama_tabel;'. Misal, describe nasabah; .

```
MariaDB [perbankan]> show tables
-> ;
+-----+
| Tables_in_perbankan |
+-----+
| cabang_bank          |
| nasabah              |
| nasabah_has_rekening |
| rekening             |
| transaksi            |
+-----+
5 rows in set (0.001 sec)

MariaDB [perbankan]> describe nasabah;
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id_nasabah     | int(11)       | NO   | PRI | NULL    |       |
| nama_nasabah   | varchar(45)   | NO   |     | NULL    |       |
| alamat_nasabah | varchar(255)  | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.023 sec)

MariaDB [perbankan]> describe cabang_bank;
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| kode_cabang    | varchar(20)   | NO   | PRI | NULL    |       |
| nama_cabang    | varchar(45)   | NO   | UNI | NULL    |       |
| alamat_cabang  | varchar(255)  | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.023 sec)

MariaDB [perbankan]> describe rekening;
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| no_rekening    | int(11)       | NO   | PRI | NULL    |       |
| kode_cabangFK  | varchar(20)   | YES  |     | NULL    |       |
| pin            | varchar(20)   | NO   |     | 1234    |       |
| saldo          | int(11)       | NO   |     | 0        |       |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.021 sec)
```

```
MariaDB [perbankan]> describe transaksi;
```

Field	Type	Null	Key	Default	Extra
no_transaksi	bigint(20) unsigned	NO	PRI	NULL	auto_increment
id_nasabahFK	int(11)	YES		NULL	
no_rekeningFK	int(11)	YES		NULL	
jenis_transaksi	varchar(20)	NO		debit	
tanggal	datetime	NO		current_timestamp()	
jumlah	int(11)	NO		NULL	

```
6 rows in set (0.030 sec)
```

```
MariaDB [perbankan]> describe nasabah_has_rekening;
```

Field	Type	Null	Key	Default	Extra
id_nasabahFK	int(11)	NO	PRI	NULL	
no_rekeningFK	int(11)	NO	PRI	NULL	

```
2 rows in set (0.030 sec)
```

```
MariaDB [perbankan]>
```

NB: titik koma(" ; ") jangan sampai lupa disetiap perintah ;)