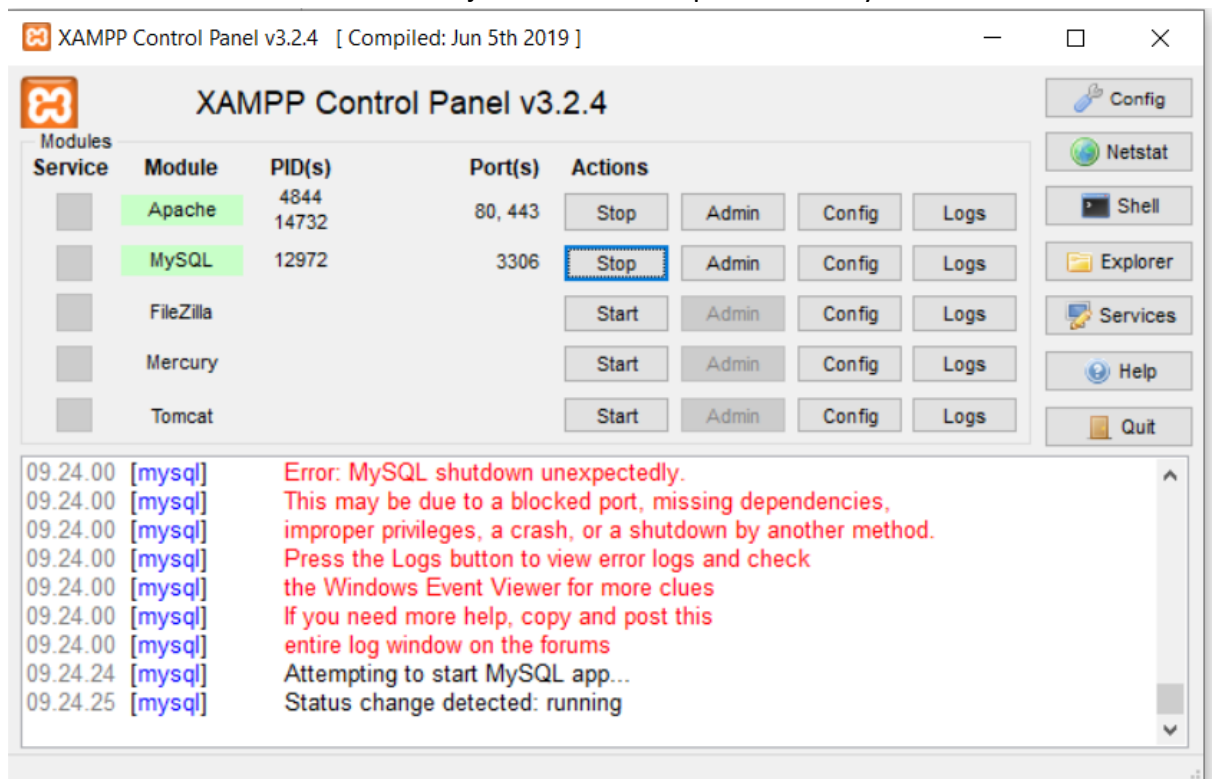


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LAPORAN KEGIATAN PRAKTIKUM

SISTEM BASIS DATA MODUL 4

1. Jalankan XAMPP Control Panel dan jalankan server Apache dan MySQL



2. Buka cmd dan login sebagai root ke MySQL

```
Command Prompt - mysql -u root -p
D:\app\XAMPP\mysql\bin> -u root -p
'-u' is not recognized as an internal or external command,
operable program or batch file.

D:\app\XAMPP\mysql\bin>mysql -u root -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 28
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.

MariaDB [(none)]>
```

3. Buat database baru dan membuat table nasabah

```
Command Prompt - mysql -u root -p

D:\app\XAMPP\mysql\bin>mysql -u root -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 28
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.

MariaDB [(none)]> create database perbankan;
Query OK, 1 row affected (0.001 sec)

MariaDB [(none)]> use perbankan;
Database changed
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 (1.755 sec)

MariaDB [perbankan]> show tables;
+-----+
| Tables_in_perbankan |
+-----+
| nasabah              |
+-----+
1 row in set (0.001 sec)
```

4. Mebuat table cabang_bank

```
Command Prompt - mysql -u root -p

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 (1.689 sec)

MariaDB [perbankan]> show tables;
+-----+
| Tables_in_perbankan |
+-----+
| cabang_bank          |
| nasabah              |
+-----+
2 rows in set (0.001 sec)

MariaDB [perbankan]>
```

5. Membuat table rekening dan table transaksi

```
Command Prompt - mysql -u root -p

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 (0.050 sec)

MariaDB [perbankan]> CREATE TABLE transaksi(
  -> no_transaksi INTEGER 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 (0.064 sec)

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

6. Membuat table nasabah_has_rekening

```
Command Prompt - mysql -u root -p

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 (1.821 sec)

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

MariaDB [perbankan]>
```

7. Melihat struktur tiap table

```
Command Prompt - mysql -u root -p

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 (0.008 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 (0.005 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       |       |
+-----+-----+-----+-----+-----+-----+

Command Prompt - mysql -u root -p

MariaDB [perbankan]> describe transaksi;
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| no_transaksi   | int(11)       | NO   | PRI | NULL    |       |
| 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 (0.005 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 (0.005 sec)
```