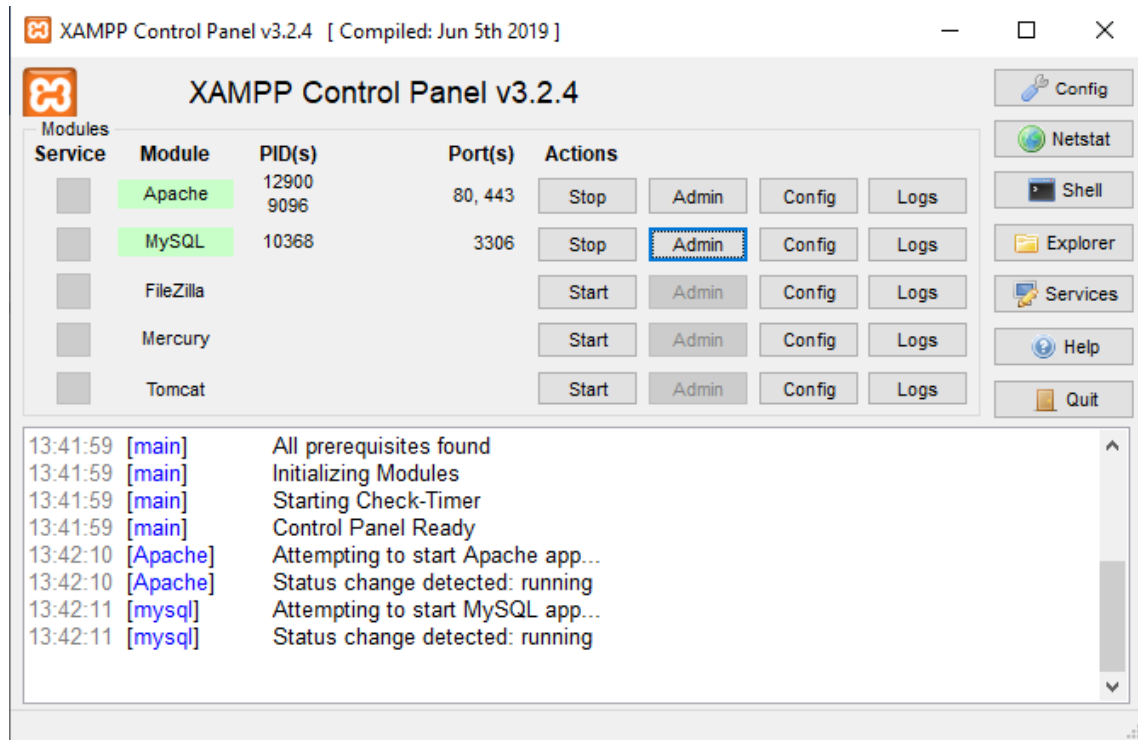**Nama : Kurniawan Andika W.**
NIM   : L200180115
Kelas : E

Praktikum Basis Data Modul 4

```
C:\WINDOWS\system32\cmd.exe - 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 (0.252 sec)

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 (0.289 sec)

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 (0.259 sec)
```

```
C:\WINDOWS\system32\cmd.exe - mysql  -u root -p                                      —  □  ×

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 (0.033 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 (0.024 sec)

MariaDB [perbankan]>
```

TUGAS

```
C:\WINDOWS\system32\cmd.exe - mysql -u root -p
Microsoft Windows [Version 10.0.18362.720]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\pasha>cd c:\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.

MariaDB [(none)]> CREATE DATABASE dbkuliah;
Query OK, 1 row affected (0.004 sec)

MariaDB [(none)]> use dbkuliah;
Database changed
MariaDB [dbkuliah]> CREATE TABLE mahasiswa(
    -> nim_mhs INTEGER PRIMARY KEY,
    -> nama_mhs VARCHAR(255) NOT NULL,
    -> alamat_mhs VARCHAR(255) NOT NULL,
    -> gender_mhs VARCHAR(25) NOT NULL
    -> );
Query OK, 0 rows affected (0.335 sec)

MariaDB [dbkuliah]> CREATE TABLE dosen(
    -> nip_dosen INTEGER PRIMARY KEY,
    -> nama_dosen VARCHAR(255) NOT NULL,
    -> alamat_dosen VARCHAR(255) NOT NULL
    -> );
Query OK, 0 rows affected (0.389 sec)


MariaDB [dbkuliah]> ALTER TABLE mahasiswa ADD nip_dosen INTEGER REFERENCES dosen(nip_dosen)
    -> ON DELETE SET NULL ON UPDATE CASCADE;
Query OK, 0 rows affected (0.179 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

```
MariaDB [dbkuliah]> CREATE TABLE ruang_kelas(
    -> kode_rk INTEGER PRIMARY KEY,
    -> kapasitas INTEGER NOT NULL
    -> );
Query OK, 0 rows affected (0.334 sec)

MariaDB [dbkuliah]> describe ruang_kelas;
+-----------+---------+------+-----+---------+-------+
| Field     | Type    | Null | Key | Default | Extra |
+-----------+---------+------+-----+---------+-------+
| kode_rk   | int(11) | NO   | PRI | NULL    |       |
| kapasitas | int(11) | NO   |     | NULL    |       |
+-----------+---------+------+-----+---------+-------+
2 rows in set (0.100 sec)

MariaDB [dbkuliah]> CREATE TABLE mata_kuliah(
    -> kode_mk INTEGER PRIMARY KEY,
    -> kode_rk INTEGER REFERENCES ruang_kelas(kode_rk)
    -> ON DELETE SET NULL ON UPDATE CASCADE,
    -> nama_mk VARCHAR(25) NOT NULL,
    -> jumlah_sks INTEGER NOT NULL
    -> );
Query OK, 0 rows affected (0.271 sec)

MariaDB [dbkuliah]> CREATE TABLE mahasiswa_has_mata_kuliah(
    -> nim_mhs INTEGER REFERENCES mahasiswa(nim_mhs)
    -> ON DELETE CASCADE ON UPDATE CASCADE,
    -> kode_mk INTEGER REFERENCES mata_kuliah(kode_mk)
    -> ON DELETE CASCADE ON UPDATE CASCADE,
    -> PRIMARY KEY(nim_mhs,kode_mk)
    -> );
Query OK, 0 rows affected (0.288 sec)
```

```
MariaDB [dbkuliah]> show tables;
+---------------------------+
| Tables_in_dbkuliah        |
+---------------------------+
| dosen                     |
| mahasiswa                 |
| mahasiswa_has_mata_kuliah |
| mata_kuliah               |
| ruang_kelas               |
+---------------------------+
5 rows in set (0.001 sec)

MariaDB [dbkuliah]> describe dosen;
+--------------+--------------+------+-----+---------+-------+
| Field        | Type         | Null | Key | Default | Extra |
+--------------+--------------+------+-----+---------+-------+
| nip_dosen    | int(11)      | NO   | PRI | NULL    |       |
| nama_dosen   | varchar(255) | NO   |     | NULL    |       |
| alamat_dosen | varchar(255) | NO   |     | NULL    |       |
+--------------+--------------+------+-----+---------+-------+
3 rows in set (0.026 sec)

MariaDB [dbkuliah]> describe mahasiswa;
+------------+--------------+------+-----+---------+-------+
| Field      | Type         | Null | Key | Default | Extra |
+------------+--------------+------+-----+---------+-------+
| nim_mhs    | int(11)      | NO   | PRI | NULL    |       |
| nama_mhs   | varchar(255) | NO   |     | NULL    |       |
| alamat_mhs | varchar(255) | NO   |     | NULL    |       |
| gender_mhs | varchar(25)  | NO   |     | NULL    |       |
| nip_dosen  | int(11)      | YES  |     | NULL    |       |
+------------+--------------+------+-----+---------+-------+
5 rows in set (0.024 sec)
```

```
MariaDB [dbkuliah]> describe mata_kuliah;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| kode_mk     | int(11)     | NO   | PRI | NULL    |       |
| kode_rk     | int(11)     | YES  |     | NULL    |       |
| nama_mk     | varchar(25) | NO   |     | NULL    |       |
| jumlah_sks  | int(11)     | NO   |     | NULL    |       |
+-------------+-------------+------+-----+---------+-------+
4 rows in set (0.094 sec)

MariaDB [dbkuliah]> describe ruang_kelas;
+-----------+---------+------+-----+---------+-------+
| Field     | Type    | Null | Key | Default | Extra |
+-----------+---------+------+-----+---------+-------+
| kode_rk   | int(11) | NO   | PRI | NULL    |       |
| kapasitas | int(11) | NO   |     | NULL    |       |
+-----------+---------+------+-----+---------+-------+
2 rows in set (0.024 sec)

MariaDB [dbkuliah]> describe mahasiswa_has_mata_kuliah;
+---------+---------+------+-----+---------+-------+
| Field   | Type    | Null | Key | Default | Extra |
+---------+---------+------+-----+---------+-------+
| nim_mhs | int(11) | NO   | PRI | NULL    |       |
| kode_mk | int(11) | NO   | PRI | NULL    |       |
+---------+---------+------+-----+---------+-------+
2 rows in set (0.026 sec)

MariaDB [dbkuliah]>
```