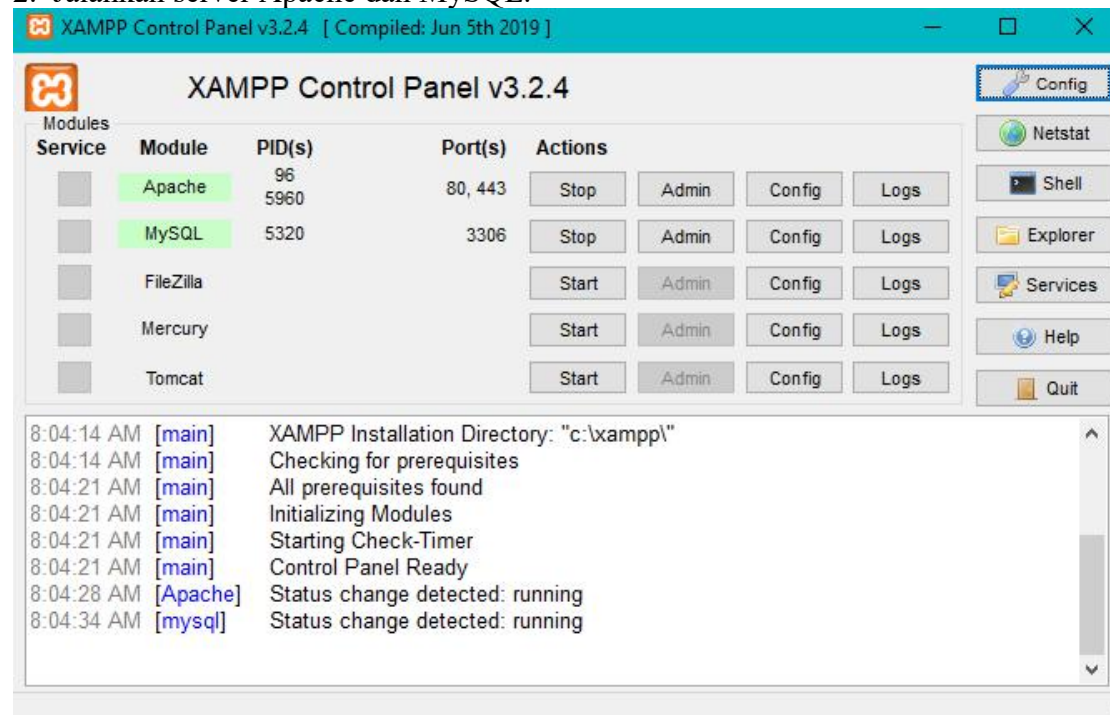


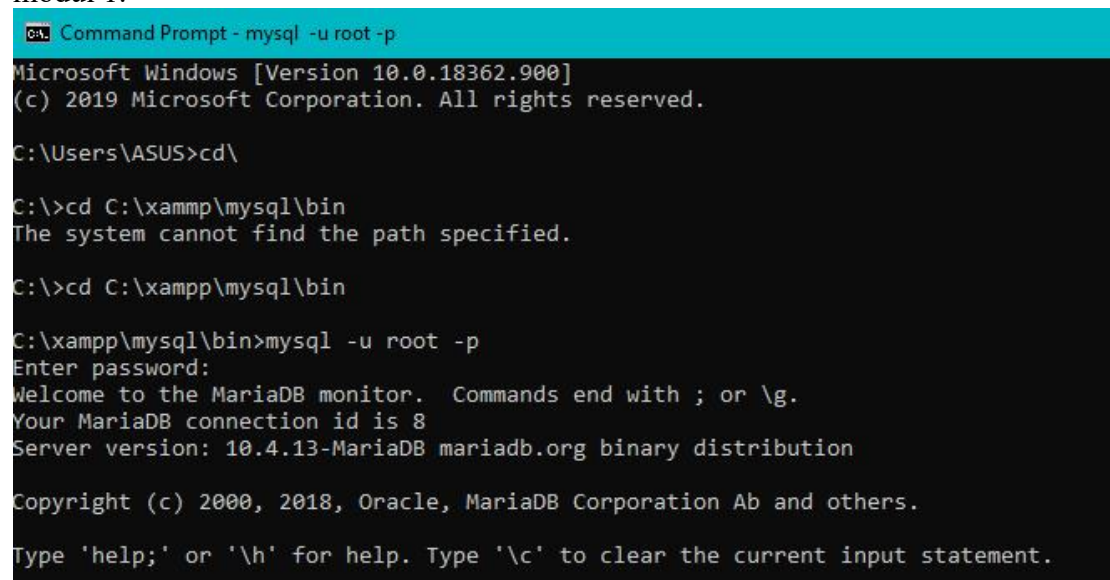
Nama : Sevtika Ichitia
NIM : L200180158
Modul 4

LATIHAN

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



3. Buka Command Prompt dan login sebagai root ke MySQL seperti dilangkah pada modul 1.



4. Buat database baru dengan perintah berikut ini: create database perbankan;

```
MariaDB [(none)]> create database perbankan;
Query OK, 1 row affected (0.143 sec)
```

5. Hubungkan ke dalam database yang telah dibuat dengan perintah berikut. Sehingga akan muncul pemberitahuan “database changed”. use perbankan;

```
Command Prompt - mysql -u root -p
Microsoft Windows [Version 10.0.18362.900]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\ASUS>cd\

C:\>cd C:\xampp\mysql\bin
The system cannot find the path specified.

C:\>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 8
Server version: 10.4.13-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 (0.143 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 (1.031 sec)

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 (0.424 sec)

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 (0.598 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 (0.481 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 (0.436 sec)
```

Command Prompt - mysql -u root -p

MariaDB [perbankan]> show tables;

| Tables_in_perbankan |
|----------------------|
| cabang_bank |
| nasabah |
| nasabah_has_rekening |
| rekening |
| transaksi |

5 rows in set (0.175 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 (0.207 sec)

MariaDB [perbankan]>

TUGAS

Database Kuliah

```
ca Command Prompt - mysql -u root -p
Microsoft Windows [Version 10.0.18362.900]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\ASUS>cd\

C:\>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 9
Server version: 10.4.13-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 kuliah;
Query OK, 1 row affected (0.028 sec)

MariaDB [(none)]> use kuliah;
Database changed
MariaDB [kuliah]> CREATE TABLE mahasiswa(
  -> NIM_mahasiswa VARCHAR(20)PRIMARY KEY,
  -> nama_mahasiswa VARCHAR(45)NOT NULL,
  -> alamat_mahasiswa VARCHAR(255)NOT NULL,
  -> kode_rkFK INTEGER REFERENCES rk(kode_rk)ON DELETE SET NULL ON UPDATE CASCADE);
Query OK, 0 rows affected (0.383 sec)

ca Command Prompt - mysql -u root -p
MariaDB [kuliah]> CREATE TABLE dosen(
  -> id_dosen INTEGER PRIMARY KEY,
  -> nama_dosen VARCHAR(45) NOT NULL,
  -> alamat_dosen VARCHAR(255) NOT NULL);
Query OK, 0 rows affected (0.407 sec)

MariaDB [kuliah]> CREATE TABLE mata_kuliah(
  -> kode_mk VARCHAR(20) PRIMARY KEY,
  -> nama_mk VARCHAR(45)NOT NULL,
  -> jmlh_sks INTEGER DEFAULT 0 NOT NULL);
Query OK, 0 rows affected (0.306 sec)

MariaDB [kuliah]> CREATE TABLE ruang_kelas(
  -> kode_rkFK INTEGER PRIMARY KEY,
  -> nama_rk VARCHAR(45)NOT NULL,
  -> kapasitas_ruang INTEGER DEFAULT 0 NOT NULL);
Query OK, 0 rows affected (0.311 sec)

MariaDB [kuliah]> CREATE TABLE mahasiswa_has_dosen(
  -> NIM_mahasiswaFK VARCHAR(20) REFERENCES mahasiswa(NIM_mahasiswa)ON DELETE SET NULL ON UPDATE CASCADE);
Query OK, 0 rows affected (0.472 sec)
```


C:\ Command Prompt - mysql -u root -p

MariaDB [kuliah]> show tables;

| Tables_in_kuliah |
|---------------------|
| dosen |
| mahasiswa |
| mahasiswa_has_dosen |
| mata_kuliah |
| ruang_kelas |

5 rows in set (0.002 sec)

MariaDB [kuliah]> describe dosen;

| Field | Type | Null | Key | Default | Extra |
|--------------|--------------|------|-----|---------|-------|
| id_dosen | int(11) | NO | PRI | NULL | |
| nama_dosen | varchar(45) | NO | | NULL | |
| alamat_dosen | varchar(255) | NO | | NULL | |

3 rows in set (0.041 sec)

MariaDB [kuliah]> describe mahasiswa;

| Field | Type | Null | Key | Default | Extra |
|------------------|--------------|------|-----|---------|-------|
| NIM_mahasiswa | varchar(20) | NO | PRI | NULL | |
| nama_mahasiswa | varchar(45) | NO | | NULL | |
| alamat_mahasiswa | varchar(255) | NO | | NULL | |
| kode_rkFK | int(11) | YES | | NULL | |

4 rows in set (0.044 sec)

MariaDB [kuliah]> describe mata_kuliah;

| Field | Type | Null | Key | Default | Extra |
|----------|-------------|------|-----|---------|-------|
| kode_mk | varchar(20) | NO | PRI | NULL | |
| nama_mk | varchar(45) | NO | | NULL | |
| jmlh_sks | int(11) | NO | | 0 | |

3 rows in set (0.221 sec)

MariaDB [kuliah]> describe ruang_kelas;

| Field | Type | Null | Key | Default | Extra |
|-----------------|-------------|------|-----|---------|-------|
| kode_rkFK | int(11) | NO | PRI | NULL | |
| nama_rk | varchar(45) | NO | | NULL | |
| kapasitas_ruang | int(11) | NO | | 0 | |

3 rows in set (0.148 sec)

Tugas Database Buku

```
C:\ Command Prompt - mysql -u root -p
MariaDB [(none)]> use buku;
Database changed
MariaDB [buku]> CREATE TABLE staff(
  -> id_staff INTEGER PRIMARY KEY,
  -> nama_staff VARCHAR(45)NOT NULL,
  -> alamat_staff VARCHAR(255)NOT NULL);
Query OK, 0 rows affected (0.338 sec)

MariaDB [buku]> CREATE TABLE konsumen(
  -> id_konsumen INTEGER PRIMARY KEY,
  -> nama_konsumen VARCHAR(45)NOT NULL,
  -> alamat_konsumen VARCHAR(255)NOT NULL);
Query OK, 0 rows affected (0.371 sec)

MariaDB [buku]> CREATE TABLE buku(
  -> id_buku INTEGER PRIMARY KEY,
  -> judul_buku VARCHAR(45)NOT NULL,
  -> harga_buku INTEGER DEFAULT 0 NOT NULL);
Query OK, 0 rows affected (0.320 sec)

MariaDB [buku]> CREATE TABLE supplier(
  -> id_supplier INTEGER PRIMARY KEY,
  -> nama_supplier VARCHAR(45)NOT NULL,
  -> alamat_supplier VARCHAR(255)NOT NULL);
Query OK, 0 rows affected (0.550 sec)

MariaDB [buku]> CREATE TABLE konsumen_has_buku(
  -> id_konsumenFK INTEGER REFERENCES konsumen(id_konsumen)ON DELETE CASCADE ON UPDATE CASCADE,
  -> id_bukuFK INTEGER REFERENCES buku(id_buku)ON DELETE CASCADE ON UPDATE CASCADE);
Query OK, 0 rows affected (0.237 sec)

C:\ Command Prompt - mysql -u root -p
MariaDB [buku]> show tables;
+-----+
| Tables_in_buku |
+-----+
| buku            |
| konsumen        |
| konsumen_has_buku |
| staff           |
| supplier        |
+-----+
5 rows in set (0.002 sec)

MariaDB [buku]> describe staff;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id_staff   | int(11)   | NO   | PRI | NULL    |       |
| nama_staff | varchar(45) | NO   |     | NULL    |       |
| alamat_staff | varchar(255) | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.041 sec)

MariaDB [buku]> describe konsumen;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id_konsumen | int(11)   | NO   | PRI | NULL    |       |
| nama_konsumen | varchar(45) | NO   |     | NULL    |       |
| alamat_konsumen | varchar(255) | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.042 sec)
```

Command Prompt - mysql -u root -p

MariaDB [buku]> describe buku;

| Field | Type | Null | Key | Default | Extra |
|------------|-------------|------|-----|---------|-------|
| id_buku | int(11) | NO | PRI | NULL | |
| judul_buku | varchar(45) | NO | | NULL | |
| harga_buku | int(11) | NO | | 0 | |

3 rows in set (0.074 sec)

MariaDB [buku]> describe supplier;

| Field | Type | Null | Key | Default | Extra |
|-----------------|--------------|------|-----|---------|-------|
| id_supplier | int(11) | NO | PRI | NULL | |
| nama_supplier | varchar(45) | NO | | NULL | |
| alamat_supplier | varchar(255) | NO | | NULL | |

3 rows in set (0.046 sec)

MariaDB [buku]>