

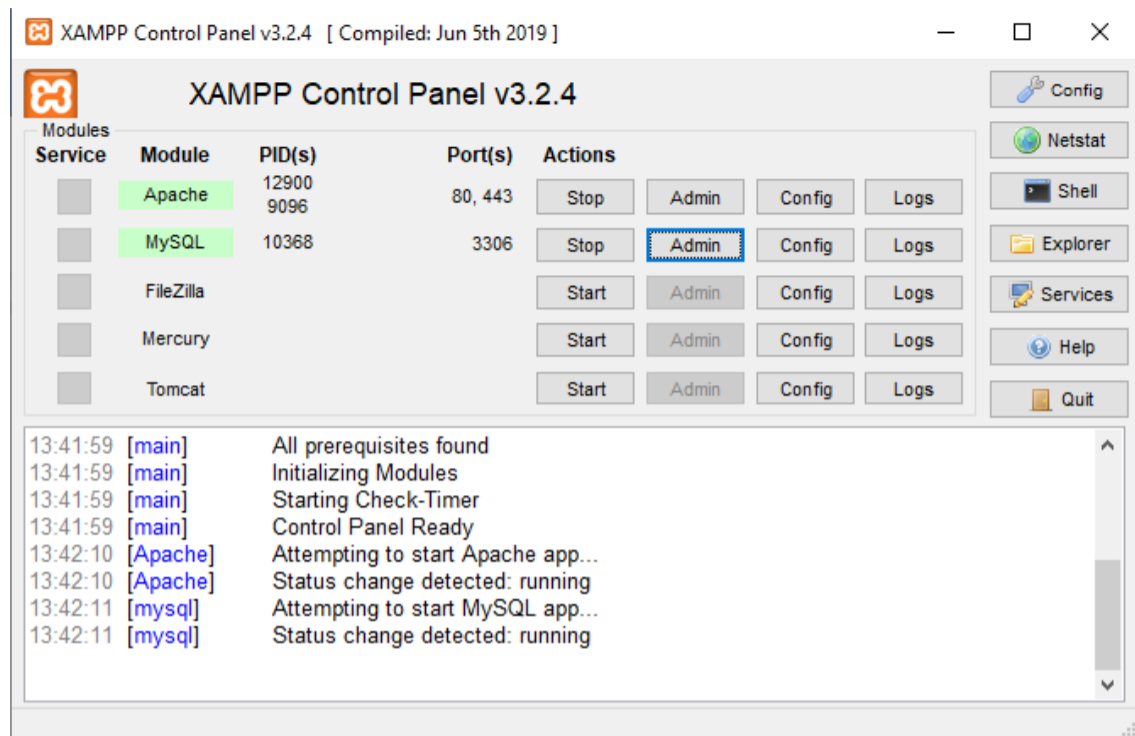
Praktikum Basis Data

Modul 4

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Latihan



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

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 27
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 (0.003 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 (0.479 sec)

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 (0.429 sec)
```

```
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]>