

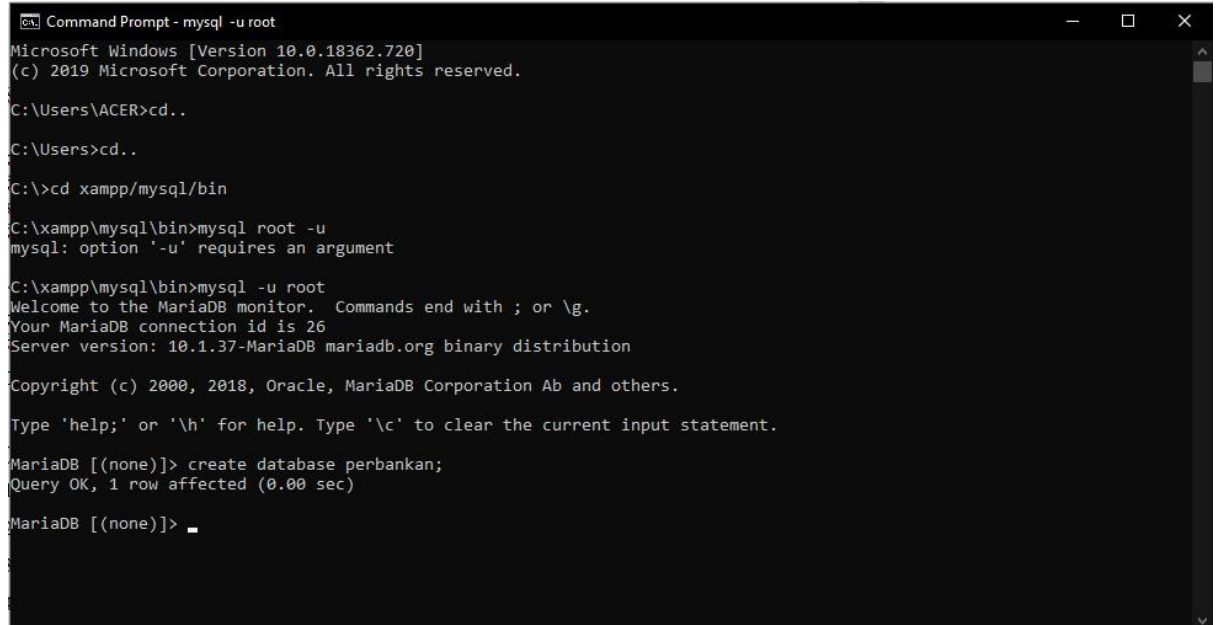
Nama : Abid Muhammad Taufiq

NIM : L200180059

Kelas : C

MODUL 4

1. Membuat database perbankan



```
Command Prompt - mysql -u root
Microsoft Windows [Version 10.0.18362.720]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\ACER>cd..

C:\Users>cd..

C:\>cd xampp/mysql/bin

C:\xampp\mysql\bin>mysql root -u
mysql: option '-u' requires an argument

C:\xampp\mysql\bin>mysql -u root
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 26
Server version: 10.1.37-MariaDB mariadb.org binary distribution

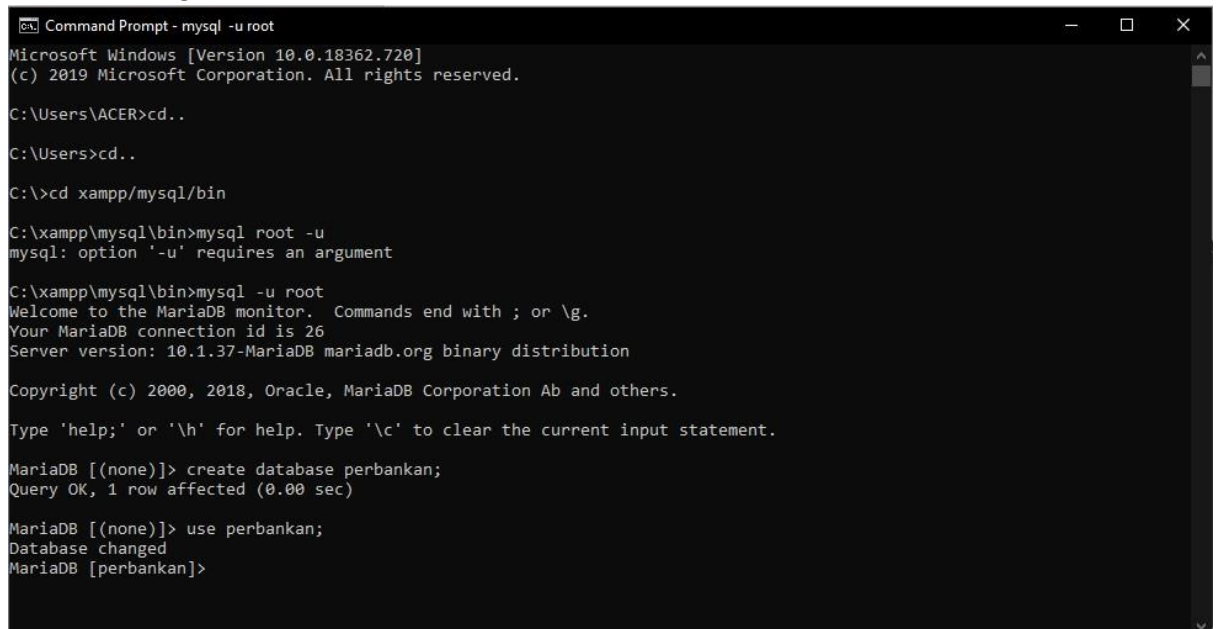
Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

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

MariaDB [(none)]> create database perbankan;
Query OK, 1 row affected (0.00 sec)

MariaDB [(none)]> _
```

2. Database change



```
Command Prompt - mysql -u root
Microsoft Windows [Version 10.0.18362.720]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\ACER>cd..

C:\Users>cd..

C:\>cd xampp/mysql/bin

C:\xampp\mysql\bin>mysql root -u
mysql: option '-u' requires an argument

C:\xampp\mysql\bin>mysql -u root
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 26
Server version: 10.1.37-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 (0.00 sec)

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

3. tabel nasabah

```
Command Prompt - mysql -u root
C:\xampp\mysql\bin>mysql root -u
mysql: option '-u' requires an argument

C:\xampp\mysql\bin>mysql -u root
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 26
Server version: 10.1.37-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 (0.00 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 (0.02 sec)

MariaDB [perbankan]> _
```

4. Membuat tabel cabang bank

```
Command Prompt - mysql -u root
MariaDB [(none)]> create database perbankan;
Query OK, 1 row affected (0.00 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 (0.02 sec)

MariaDB [perbankan]> create tabel cabang_bank(
  -> kode_cabang VARCHAR(20) PRIMARY KEY,
  -> nama_cabang VARCHAR(45) UNIQUE NOT NULL,
  -> alamat_cabang VARCHAR(255) NOT NULL
  -> );
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near 'tabel cabang_bank(
kode_cabang VARCHAR(20) PRIMARY KEY,
nama_cabang VARCHAR(45) ' at line 1
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 (0.03 sec)

MariaDB [perbankan]> _
```

5. tabel rekening

```
Command Prompt - mysql -u root
on for the right syntax to use near 'tabel cabang_bank(
kode_cabang VARCHAR(20) PRIMARY KEY,
nama_cabang VARCHAR(45) ' at line 1
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 (0.03 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 (0.02 sec)

MariaDB [perbankan]>
```

6. Membuat tabel transaksi

```
Command Prompt - mysql -u root
nama_cabang VARCHAR(45) ' at line 1
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 (0.03 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 (0.02 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 (0.05 sec)

MariaDB [perbankan]>
```

7. tabel nasabah_has_rekening

```
Command Prompt - mysql -u root
-> 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 (0.02 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 (0.05 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 (0.02 sec)

MariaDB [perbankan]> _
```

8. Mengecek hasil database

```
Command Prompt - mysql -u root
-> 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 (0.05 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 (0.02 sec)

MariaDB [perbankan]> show tables;
+-----+
| Tables_in_perbankan |
+-----+
| cabang_bank          |
| nasabah              |
| nasabah_has_rekening |
| rekening             |
| transaksi            |
+-----+
5 rows in set (0.00 sec)

MariaDB [perbankan]>
```

9. melihat struktur tiap tabel

```
Command Prompt - mysql -u root
-> 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 (0.02 sec)

MariaDB [perbankan]> show tables;
+-----+
| Tables_in_perbankan |
+-----+
| cabang_bank          |
| nasabah              |
| nasabah_has_rekening |
| rekening             |
| transaksi            |
+-----+
5 rows in set (0.00 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 (0.02 sec)

MariaDB [perbankan]>
```