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## Modul 4

### Latihan

1. Masuk ke direktori c:\xampp\mysql\bin lalu masuk sebagai admin (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 3
Server version: 10.1.34-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)]> show databases;
+-----+
| Database |
+-----+
| booking  |
| datakost |
| gayo     |
| information_schema |
| kuliner  |
| laravel  |
| latihan_crud |
| login    |
| mylink   |
| mysql    |
| percobaan |
| performance_schema |
| phpmyadmin |
| sma_1_dayun |
| test     |
+-----+
15 rows in set (0.00 sec)
```

```
MariaDB [(none)]> create database perbankan;
Query OK, 1 row affected (0.06 sec)

MariaDB [(none)]>
```

2. membuat database perbankan dan menghubungkannya

```
MariaDB [(none)]> create database perbankan;
Query OK, 1 row affected (0.06 sec)

MariaDB [(none)]> use perbankan;
Database changed
MariaDB [perbankan]> show tables;
Empty set (0.06 sec)

MariaDB [perbankan]> create table nasabah(
  -> id_nasabah INTEGER PRIMARY KEY,
  -> nama_nasabah VARCHAR(45) NOT NULL,
  -> alamat_nasabah VARCHAR(225) NOT NULL
  -> );
Query OK, 0 rows affected (0.48 sec)

MariaDB [perbankan]> create table cabang_bank(
  -> kode_cabang VARCHAR(20) PRIMARY KEY,
  -> nama_cabang VARCHAR(45) UNIQUE NOT NULL,
  -> alamat_cabang VARCHAR(225) NOT NULL
  -> );
Query OK, 0 rows affected (0.65 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 (0.28 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 (0.28 sec)
```

### 3. membuat table nasabah, rekening, transaksi, cabang bank dan (karena m:n ada tambahan table nasabah\_has\_rekening)

```
MariaDB [(none)]> create database perbankan;
Query OK, 1 row affected (0.06 sec)

MariaDB [(none)]> use perbankan;
Database changed
MariaDB [perbankan]> show tables;
Empty set (0.06 sec)

MariaDB [perbankan]> create table nasabah(
  -> id_nasabah INTEGER PRIMARY KEY,
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  -> no_rekening INTEGER PRIMARY KEY,
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  -> );
Query OK, 0 rows affected (0.28 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 (0.28 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 (0.28 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 (0.30 sec)
```

### 4. menampilkan table pada database perbankan dan melihat struktur table nasabah

```
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(225) | NO   |     | NULL    |       |
+-----+
3 rows in set (0.15 sec)
```