

NAMA : FANNISA RM

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KELAS : B

Latihan

```
Command Prompt - mysql -u root -p
Microsoft Windows [Version 10.0.18362.720]
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C:\Users\ACER-DESKTOP>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 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 perbankan;
Query OK, 1 row affected (0.009 sec)

MariaDB [(none)]> CREATE TABLE nasabah (
  -> id_nasabah INTEGER PRIMARY KEY,
  -> nama_nasabah VARCHAR(45) NOT NULL,
  -> alamat_nasabah VARCHAR(255) NOT NULL
  -> );
ERROR 1046 (3D000): No database selected
MariaDB [(none)]> show tables;
ERROR 1046 (3D000): No database selected
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 (0.631 sec)

MariaDB [perbankan]> show tables;
+-----+
| Tables_in_perbankan |
+-----+
| nasabah              |
+-----+
1 row in set (0.001 sec)
```

```
Command Prompt - mysql -u root -p
MariaDB [perbankan]> show tables;
+-----+
| Tables_in_perbankan |
+-----+
| nasabah              |
+-----+
1 row in set (0.001 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 (0.226 sec)

MariaDB [perbankan]> show tables;
+-----+
| Tables_in_perbankan |
+-----+
| cabang_bank          |
| nasabah              |
+-----+
2 rows in set (0.001 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 (0.234 sec)

MariaDB [perbankan]> show tables;
+-----+
| Tables_in_perbankan |
+-----+
| cabang_bank          |
| nasabah              |
| rekening             |
+-----+
3 rows in set (0.001 sec)

MariaDB [perbankan]> CREATE TABLE transaksi
```

```
Command Prompt - mysql -u root

MariaDB [(none)]> create database perbankan;
ERROR 1007 (HY000): Can't create database 'perbankan'; database exists
MariaDB [(none)]> CREATE DATABASE IF NOT EXISTS perbankan;
Query OK, 0 rows affected, 1 warning (0.001 sec)

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

MariaDB [perbankan]> show tables;
+-----+
| Tables_in_perbankan |
+-----+
| cabang_bank         |
| nasabah             |
| rekening            |
| transaksi            |
+-----+
4 rows in set (0.001 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 (0.268 sec)

MariaDB [perbankan]> show tables;
+-----+
| Tables_in_perbankan |
+-----+
| cabang_bank         |
| nasabah             |
| rekening            |
| transaksi            |
+-----+
4 rows in set (0.001 sec)
```

```
Command Prompt - mysql -u root

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 (0.268 sec)

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]>
```

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Command Prompt - mysql -u root
MariaDB [perbankan]> describe rekening;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| no_rekening | int(11)   | NO   | PRI | NULL    |       |
| kode_cabangFK | varchar(20) | YES  |     | NULL    |       |
| pin        | varchar(20) | NO   |     | 1234    |       |
| saldo      | int(11)   | NO   |     | 0       |       |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.034 sec)

MariaDB [perbankan]> describe transaksi;
-> describe transaksi;
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 'describe tr
ansaksi' at line 2
MariaDB [perbankan]> describe transaksi;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| no_transaksi | bigint(20) unsigned | NO   | PRI | NULL    | auto_increment |
| id_nasabahFK | int(11)   | YES  |     | NULL    |       |
| no_rekeningFK | int(11)   | YES  |     | NULL    |       |
| jenis_transaksi | varchar(20) | NO   |     | debit   |       |
| tanggal      | datetime  | NO   |     | current_timestamp() |       |
| jumlah      | int(11)   | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
6 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 (0.035 sec)

MariaDB [perbankan]> describe nasabah_has_rekening;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id_nasabahFK | int(11)   | NO   | PRI | NULL    |       |
| no_rekeningFK | int(11)   | NO   | PRI | NULL    |       |
+-----+-----+-----+-----+-----+-----+
```

Tugas

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Command Prompt - mysql -u root -p
MariaDB [kuliaah]> \q
Bye

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 31
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 IF NOT EXISTS kuliaah;
Query OK, 0 rows affected, 1 warning (0.001 sec)

MariaDB [(none)]> use kuliaah;
Database changed
MariaDB [kuliaah]> CREATE TABLE mahasiswa (
->   id_mahasiswa INTEGER PRIMARY KEY,
->   id_dosenFK INTEGER REFERENCES dosen(id_dosen)
->   ON DELETE CASCADE ON UPDATE CASCADE,
->   nama_mahasiswa VARCHAR(45) UNIQUE NOT NULL,
->   alamat_mahasiswa VARCHAR(255) NOT NULL,
->   ttl_mahasiswa VARCHAR(45) UNIQUE NOT NULL
-> );
Query OK, 0 rows affected (0.239 sec)

MariaDB [kuliaah]> show tables;
+-----+
| Tables_in_kuliaah |
+-----+
| mahasiswa          |
+-----+
1 row in set (0.001 sec)

MariaDB [kuliaah]> CREATE TABLE dosen (
->   id_dosen INTEGER PRIMARY KEY,
->   nama_dosen VARCHAR(45) UNIQUE NOT NULL,
->   alamat_dosen 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 ')' at line
5
MariaDB [kuliaah]> CREATE TABLE dosen (
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Command Prompt - mysql -u root -p
5
MariaDB [kuliah]> CREATE TABLE dosen (
  -> id_dosen INTEGER PRIMARY KEY,
  -> nama_dosen VARCHAR(45) UNIQUE NOT NULL,
  -> alamat_dosen VARCHAR(255) NOT NULL
  -> );
Query OK, 0 rows affected (0.209 sec)

MariaDB [kuliah]> show tables;
+-----+
| Tables_in_kuliah |
+-----+
| dosen             |
| mahasiswa         |
+-----+
2 rows in set (0.000 sec)

MariaDB [kuliah]> CREATE TABLE ruangkelas (
  -> kode_ruang VARCHAR(45) PRIMARY KEY,
  -> kode_matakuliahFK VARCHAR(45) REFERENCES matakuliah(kode_matakuliah)
  -> ON DELETE CASCADE ON UPDATE CASCADE,
  -> kapasitas_ruang VARCHAR(45) NOT NULL
  -> );
Query OK, 0 rows affected (0.210 sec)

MariaDB [kuliah]> show tables;
+-----+
| Tables_in_kuliah |
+-----+
| dosen             |
| mahasiswa         |
| ruangkelas        |
+-----+
3 rows in set (0.001 sec)

MariaDB [kuliah]> CREATE TABLE matakuliah (
  -> kode_matakuliah VARCHAR(45) PRIMARY KEY,
  -> kode_dosenFK VARCHAR(45) REFERENCES dosen(kode_dosen)
  -> ON DELETE CASCADE ON UPDATE CASCADE,
  -> id_dosenFK INTEGER REFERENCES dosen(id_dosen)
  -> ON DELETE CASCADE ON UPDATE CASCADE,
  -> nama_matakuliah VARCHAR(45) UNIQUE NOT NULL
  -> );
Query OK, 0 rows affected (0.189 sec)
```

```
Command Prompt - mysql -u root -p
+-----+
| Tables_in_kuliah |
+-----+
2 rows in set (0.000 sec)

MariaDB [kuliah]> CREATE TABLE ruangkelas (
  -> kode_ruang VARCHAR(45) PRIMARY KEY,
  -> kode_matakuliahFK VARCHAR(45) REFERENCES matakuliah(kode_matakuliah)
  -> ON DELETE CASCADE ON UPDATE CASCADE,
  -> kapasitas_ruang VARCHAR(45) NOT NULL
  -> );
Query OK, 0 rows affected (0.210 sec)

MariaDB [kuliah]> show tables;
+-----+
| Tables_in_kuliah |
+-----+
| dosen             |
| mahasiswa         |
| ruangkelas        |
+-----+
3 rows in set (0.001 sec)

MariaDB [kuliah]> CREATE TABLE matakuliah (
  -> kode_matakuliah VARCHAR(45) PRIMARY KEY,
  -> kode_dosenFK VARCHAR(45) REFERENCES dosen(kode_dosen)
  -> ON DELETE CASCADE ON UPDATE CASCADE,
  -> id_dosenFK INTEGER REFERENCES dosen(id_dosen)
  -> ON DELETE CASCADE ON UPDATE CASCADE,
  -> nama_matakuliah VARCHAR(45) UNIQUE NOT NULL
  -> );
Query OK, 0 rows affected (0.189 sec)

MariaDB [kuliah]> show tables;
+-----+
| Tables_in_kuliah |
+-----+
| dosen             |
| mahasiswa         |
| matakuliah        |
| ruangkelas        |
+-----+
4 rows in set (0.001 sec)

MariaDB [kuliah]> CREATE TABLE mahasiswa_has_matakuliah (
  -> id_mahasiswaFK INTEGER REFERENCES mahasiswa(id_mahasiswa)
```

```
Command Prompt - mysql -u root -p
MariaDB [kuliah]> CREATE TABLE mahasiswa_has_matakuliah (
  -> id_mahasiswaFK INTEGER REFERENCES mahasiswa(id_mahasiswa)
  -> ON DELETE CASCADE ON UPDATE CASCADE,
  -> kode_matakuliahFK VARCHAR(45) REFERENCES matakuliah(kode_matakuliah)
  -> ON DELETE CASCADE ON UPDATE CASCADE,
  -> PRIMARY KEY(id_mahasiswaFK, kode_matakuliahFK)
  -> );
Query OK, 0 rows affected (0.231 sec)

MariaDB [kuliah]> show tables;
+-----+
| Tables_in_kuliah |
+-----+
| dosen             |
| mahasiswa          |
| mahasiswa_has_matakuliah |
| matakuliah         |
| ruangkelas         |
+-----+
5 rows in set (0.001 sec)

MariaDB [kuliah]> 
```

```
Command Prompt - mysql -u root -p
MariaDB [kuliah]> describe dosen;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id_dosen | int(11) | NO | PRI | NULL | |
| nama_dosen | varchar(45) | NO | UNI | NULL | |
| alamat_dosen | varchar(255) | NO | | NULL | |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.027 sec)

MariaDB [kuliah]> describe mahasiswa;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id_mahasiswa | int(11) | NO | PRI | NULL | |
| id_dosenFK | int(11) | YES | | NULL | |
| nama_mahasiswa | varchar(45) | NO | UNI | NULL | |
| alamat_mahasiswa | varchar(255) | NO | | NULL | |
| ttl_mahasiswa | varchar(45) | NO | UNI | NULL | |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.027 sec)

MariaDB [kuliah]> describe ruangkelas;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| kode_ruang | varchar(45) | NO | PRI | NULL | |
| kode_matakuliahFK | varchar(45) | YES | | NULL | |
| kapasitas_ruang | varchar(45) | NO | | NULL | |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.027 sec)

MariaDB [kuliah]> describe matakuliah;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| kode_matakuliah | varchar(45) | NO | PRI | NULL | |
| kode_dosenFK | varchar(45) | YES | | NULL | |
| id_dosenFK | int(11) | YES | | NULL | |
| nama_matakuliah | varchar(45) | NO | UNI | NULL | |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.030 sec)
```