

Nama : Ismi Dzikrina

NIM : L200180010

Kelas : A

Matkul : Praktikum Sistem Basis Data

TUGAS MODUL 4

DATA DEFINITION LANGUAGE (DDL)

```
Microsoft Windows [Version 10.0.15063]
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C:\Users\lenovo>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 39
Server version: 10.4.11-MariaDB mariadb.org binary distribution

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

MariaDB [(none)]> create database perkuliahan;
Query OK, 1 row affected (0.047 sec)
```

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

```
MariaDB [perkuliahan]> CREATE TABLE mahasiswa(
-> NIM INTEGER PRIMARY KEY,
-> nama_mahasiswa VARCHAR(45) NOT NULL,
-> alamat_mahasiswa VARCHAR(255) NOT NULL
-> );
Query OK, 0 rows affected (0.287 sec)
```

```
MariaDB [perkuliahan]> CREATE TABLE dosen(
-> id_dosen INTEGER PRIMARY KEY,
-> nama_dosen VARCHAR(20) NOT NULL,
-> alamat_dosen VARCHAR(255) NOT NULL,
-> gaji_dosen INTEGER NOT NULL
-> );
Query OK, 0 rows affected (0.534 sec)
```

```

MariaDB [perkuliahan]> CREATE TABLE ruang_kelas(
  -> kode_kelas VARCHAR(20) PRIMARY KEY,
  -> mata_kuliah_kode_matkul VARCHAR(20) REFERENCES mata_kuliah(kode_matkul) ON DELETE SET
  NULL ON UPDATE CASCADE,
  -> kapasitas INTEGER NOT NULL
  -> );
Query OK, 0 rows affected (0.266 sec)

```

```

MariaDB [perkuliahan]> CREATE TABLE mata_kuliah(
  -> kode_matkul VARCHAR(20) PRIMARY KEY,
  -> dosen_id_dosen INTEGER REFERENCES dosen(id_dosen) ON DELETE SET NULL ON UPDATE CASCADE,
  -> nama_matkul VARCHAR(45) NOT NULL
  -> );
Query OK, 0 rows affected (0.247 sec)

```

```

MariaDB [perkuliahan]> CREATE TABLE mahasiswa_has_mata_kuliah(
  -> mata_kuliah_kode_matkul VARCHAR(20) REFERENCES mata_kuliah(kode_matkul) ON DELETE SET NUL
  L ON UPDATE CASCADE,
  -> mahasiswa_NIM INTEGER REFERENCES mahasiswa(NIM) ON DELETE SET NULL ON UPDATE CASCADE,
  -> PRIMARY KEY(mata_kuliah_kode_matkul,mahasiswa_NIM)
  -> );
Query OK, 0 rows affected (0.322 sec)

```

```

MariaDB [perkuliahan]> CREATE TABLE mahasiswa_has_dosen(
  -> mahasiswa_NIM INTEGER REFERENCES mahasiswa(NIM) ON DELETE SET NULL ON UPDATE CASCADE,
  -> dosen_id_dosen INTEGER REFERENCES dosen(id_dosen) ON DELETE SET NULL ON UPDATE CASCADE,
  -> PRIMARY KEY(mahasiswa_NIM,dosen_id_dosen)
  -> );
Query OK, 0 rows affected (0.266 sec)

```

```

MariaDB [perkuliahan]> show tables;

```

```

+-----+
| Tables_in_perkuliahan |
+-----+
| dosen                  |
| mahasiswa              |
| mahasiswa_has_dosen    |
| mahasiswa_has_mata_kuliah |
| mata_kuliah            |
| ruang_kelas            |
+-----+
6 rows in set (0.001 sec)

```

```

MariaDB [perkuliahan]> describe mahasiswa;

```

```

+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| NIM            | int(11)       | NO   | PRI | NULL    |       |
| nama_mahasiswa | varchar(45)   | NO   |     | NULL    |       |
| alamat_mahasiswa | varchar(255) | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.029 sec)

```

```
MariaDB [perkuliahan]> describe dosen;
```

| Field | Type | Null | Key | Default | Extra |
|--------------|--------------|------|-----|---------|-------|
| id_dosen | int(11) | NO | PRI | NULL | |
| nama_dosen | varchar(20) | NO | | NULL | |
| alamat_dosen | varchar(255) | NO | | NULL | |
| gaji_dosen | int(11) | NO | | NULL | |

4 rows in set (0.218 sec)

```
MariaDB [perkuliahan]> describe mata_kuliah;
```

| Field | Type | Null | Key | Default | Extra |
|----------------|-------------|------|-----|---------|-------|
| kode_matkul | varchar(20) | NO | PRI | NULL | |
| dosen_id_dosen | int(11) | YES | | NULL | |
| nama_matkul | varchar(45) | NO | | NULL | |

3 rows in set (0.029 sec)

```
MariaDB [perkuliahan]> describe ruang_kelas;
```

| Field | Type | Null | Key | Default | Extra |
|-------------------------|-------------|------|-----|---------|-------|
| kode_kelas | varchar(20) | NO | PRI | NULL | |
| mata_kuliah_kode_matkul | varchar(20) | YES | | NULL | |
| kapasitas | int(11) | NO | | NULL | |

3 rows in set (0.023 sec)