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## Tugas Sistem Basis Data

### 1. Membuat database kuliah

```
MariaDB [(none)]> create database kuliah;  
Query OK, 1 row affected (0.037 sec)  
  
MariaDB [(none)]> use kuliah;  
Database changed  
MariaDB [kuliah]> create table mahasiswa(  
    -> nim INTEGER PRIMARY KEY,  
    -> nama VARCHAR(45) NOT NULL,  
    -> alamat VARCHAR(255) NOT NULL  
    -> );  
Query OK, 0 rows affected (0.814 sec)  
  
MariaDB [kuliah]>
```

### 2. Membuat table mahasiswa, dosen, mata\_kuliah, ruang\_kelas

```
Command Prompt - mysql -u root -p  
  
MariaDB [(none)]> use kuliah;  
Database changed  
MariaDB [kuliah]> create table mahasiswa(  
    -> nim INTEGER PRIMARY KEY,  
    -> nama VARCHAR(45) NOT NULL,  
    -> alamat VARCHAR(255) NOT NULL  
    -> );  
Query OK, 0 rows affected (0.814 sec)  
  
MariaDB [kuliah]> create table dosen(  
    -> nip_dosen INTEGER PRIMARY KEY,  
    -> nama_dosen VARCHAR(45) NOT NULL,  
    -> alamat_dosen VARCHAR(255) NOT NULL  
    -> );  
Query OK, 0 rows affected (0.391 sec)  
  
MariaDB [kuliah]> create table mata_kuliah(  
    -> id_mk INTEGER PRIMARY KEY,  
    -> nama_mk VARCHAR(25) NOT NULL  
    -> );  
Query OK, 0 rows affected (0.335 sec)  
  
MariaDB [kuliah]> create table ruang_kelas(  
    -> id_ruang INTEGER PRIMARY KEY,  
    -> nama_ruang VARCHAR(25) NOT NULL  
    -> );  
Query OK, 0 rows affected (1.940 sec)  
  
MariaDB [kuliah]> _  
  
MariaDB [kuliah]> create table mahasiswa_has_dosen(  
    -> nim_mhsFK INTEGER REFERENCES mahasiswa(nim_mhs)  
    -> ON DELETE CASCADE ON UPDATE CASCADE,  
    -> nip_dosenFK INTEGER REFERENCES dosen(nip_dosen)  
    -> ON DELETE CASCADE ON UPDATE CASCADE  
    -> );  
Query OK, 0 rows affected (0.500 sec)
```

```

MariaDB [kuliah]> create table mahasiswa_has_mata_kuliah(
  -> nim_mhsFK INTEGER REFERENCES mahasiswa(nim_mhs)
  -> ON DELETE CASCADE ON UPDATE CASCADE,
  -> id_mkFK INTEGER REFERENCES mata_kuliah(id_mk)
  -> ON DELETE CASCADE ON UPDATE CASCADE,
  -> PRIMARY KEY(nim_mhsFK,id_mkFK)
  -> );
Query OK, 0 rows affected (0.451 sec)

```

```

MariaDB [kuliah]>

```

```

MariaDB [kuliah]> create table dosen_has_mata_kuliah(
  -> nip_dosenFK INTEGER REFERENCES dosen(nip_dosen)
  -> ON DELETE CASCADE ON UPDATE CASCADE,
  -> id_mkFK INTEGER REFERENCES mata_kuliah(id_mk)
  -> ON DELETE CASCADE ON UPDATE CASCADE,
  -> PRIMARY KEY(nip_dosenFK,id_mkFK)
  -> );
Query OK, 0 rows affected (2.023 sec)

```

```

MariaDB [kuliah]>

```

### 3. Melihat semua table

```

MariaDB [kuliah]> show tables;

```

```

+-----+
| Tables_in_kuliah |
+-----+
| dosen             |
| dosen_has_mata_kuliah |
| mahasiswa         |
| mahasiswa_has_dosen   |
| mahasiswa_has_mata_kuliah |
| mata_kuliah        |
| ruang_kelas       |
+-----+

```

```

7 rows in set (0.170 sec)

```

```

MariaDB [kuliah]> describe mahasiswa;

```

```

+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| nim   | int(11)       | NO   | PRI | NULL    |       |
| nama  | varchar(45)   | NO   |     | NULL    |       |
| alamat | varchar(255)  | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+

```

```

3 rows in set (0.476 sec)

```

```

MariaDB [kuliah]>

```

MariaDB [kuliah]> describe dosen;

Field	Type	Null	Key	Default	Extra
nip_dosen	int(11)	NO	PRI	NULL	
nama_dosen	varchar(45)	NO		NULL	
alamat_dosen	varchar(255)	NO		NULL	

3 rows in set (0.104 sec)

MariaDB [kuliah]> describe mat\_kuliah;

ERROR 1146 (42S02): Table 'kuliah.mat\_kuliah' doesn't exist

MariaDB [kuliah]> describe mata\_kuliah;

Field	Type	Null	Key	Default	Extra
id_mk	int(11)	NO	PRI	NULL	
nama_mk	varchar(25)	NO		NULL	

2 rows in set (0.068 sec)

MariaDB [kuliah]> \_

MariaDB [kuliah]> describe ruang\_kelas;

Field	Type	Null	Key	Default	Extra
id_ruang	int(11)	NO	PRI	NULL	
nama_ruang	varchar(25)	NO		NULL	

2 rows in set (0.049 sec)

MariaDB [kuliah]> describe dosen\_has\_mata\_kuliah;

Field	Type	Null	Key	Default	Extra
nip_dosenFK	int(11)	NO	PRI	NULL	
id_mkFK	int(11)	NO	PRI	NULL	

2 rows in set (0.043 sec)

MariaDB [kuliah]> describe mahasiswa\_has\_dosen;

Field	Type	Null	Key	Default	Extra
nim_mhsFK	int(11)	YES		NULL	
nip_dosenFK	int(11)	YES		NULL	

2 rows in set (0.043 sec)

MariaDB [kuliah]> \_

```
MariaDB [kuliah]> describe mahasiswa_has_mata_kuliah;
+-----+-----+-----+-----+-----+-----+
| Field      | Type    | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| nim_mhsFK  | int(11) | NO   | PRI | NULL    |       |
| id_mkFK    | int(11) | NO   | PRI | NULL    |       |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.043 sec)

MariaDB [kuliah]> _
```