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#### Tugas Modul 4

- a. Membuat database dan memakainya

```
MariaDB [(none)]> create database modul4
-> ;
Query OK, 1 row affected (0.01 sec)

MariaDB [(none)]> use modul4;
Database changed
```

- b. Membuat table yang dibutuhkan

```
MariaDB [modul4]> CREATE TABLE MAHASISWA(
-> NIM INTEGER PRIMARY KEY,
-> Nama_mahasiswa VARCHAR(45) NOT NULL,
-> alamat_mahasiswa VARCHAR(225) NOT NULL
-> );
Query OK, 0 rows affected (0.35 sec)

MariaDB [modul4]> CREATE TABLE DOSEN(
-> NIP INTEGER PRIMARY KEY,
-> Nama_dosen VARCHAR(45) NOT NULL,
-> alamat_dosen VARCHAR(225) NOT NULL
-> );
Query OK, 0 rows affected (0.37 sec)

MariaDB [modul4]> CREATE TABLE MATA_KULIAH(
->
-> Kode_MK VARCHAR(10) PRIMARY KEY,
-> Nama_MK VARCHAR(20) NOT NULL
-> );
Query OK, 0 rows affected (0.26 sec)

MariaDB [modul4]> CREATE TABLE RUANG_KELAS(
-> Kode_kelas VARCHAR(5) PRIMARY KEY,
-> Jenis_fungsi VARCHAR(10) NOT NULL
-> );
Query OK, 0 rows affected (0.29 sec)
```

- c. Membuat table relationship

```

MariaDB [modul4]> CREATE TABLE mahasiswa_has_dosen(
  -> NIMFK INTEGER REFERENCES MAHASISWA(NIM)
  -> ON DELETE CASCADE ON UPDATE CASCADE,
  -> NIPFK INTEGER REFERENCES DOSEN(NIP)
  -> ON DELETE CASCADE ON UPDATE CASCADE,
  -> PRIMARY KEY(NIMFK, NIPFK)
  -> );
Query OK, 0 rows affected (0.32 sec)

MariaDB [modul4]> CREATE TABLE mahasiswa_has_mata_kuliah(
  -> NIMFK INTEGER REFERENCES MAHASISWA(NIM)
  -> ON DELETE CASCADE ON UPDATE CASCADE,
  -> Kode_MKFK INTEGER REFERENCES MATA_KULIAHN(Kode_MK)
  -> ON DELETE CASCADE ON UPDATE CASCADE,
  -> PRIMARY KEY(NIMFK, Kode_MKFK)
  -> );
Query OK, 0 rows affected (0.25 sec)

MariaDB [modul4]> CREATE TABLE dosen_has_mata_kuliah(
  -> NIPFK INTEGER REFERENCES DOSEN(NIP)
  -> ON DELETE CASCADE ON UPDATE CASCADE,
  -> Kode_MKFK INTEGER REFERENCES MATA_KULIAHN(Kode_MK)
  -> ON DELETE CASCADE ON UPDATE CASCADE,
  -> PRIMARY KEY(NIPFK, Kode_MKFK)
  -> );
Query OK, 0 rows affected (0.25 sec)

MariaDB [modul4]> CREATE TABLE mata_kuliah_has_ruang_kelas(
  -> Kode_MKFK INTEGER REFERENCES MATA_KULIAHN(Kode_MK)
  -> ON DELETE CASCADE ON UPDATE CASCADE,
  -> Kode_KelasFK VARCHAR(5) REFERENCES RUANG_KELAS(Kode_kelas)
  -> ON DELETE CASCADE ON UPDATE CASCADE,
  -> PRIMARY KEY(Kode_MKFK)
  -> );
Query OK, 0 rows affected (0.38 sec)

```

d. Melihat tables yang telah dibuat

```
MariaDB [modul4]> show tables;
```

Tables_in_modul4
dosen
dosen_has_mata_kuliah
mahasiswa
mahasiswa_has_dosen
mahasiswa_has_mata_kuliah
mata_kuliah
mata_kuliah_has_ruang_kelas
ruang_kelas

```
8 rows in set (0.00 sec)
```

```
MariaDB [modul4]> describe dosen;
```

Field	Type	Null	Key	Default	Extra
NIP	int(11)	NO	PRI	NULL	
Nama_dosen	varchar(45)	NO		NULL	
alamat_dosen	varchar(225)	NO		NULL	

```
3 rows in set (0.03 sec)
```