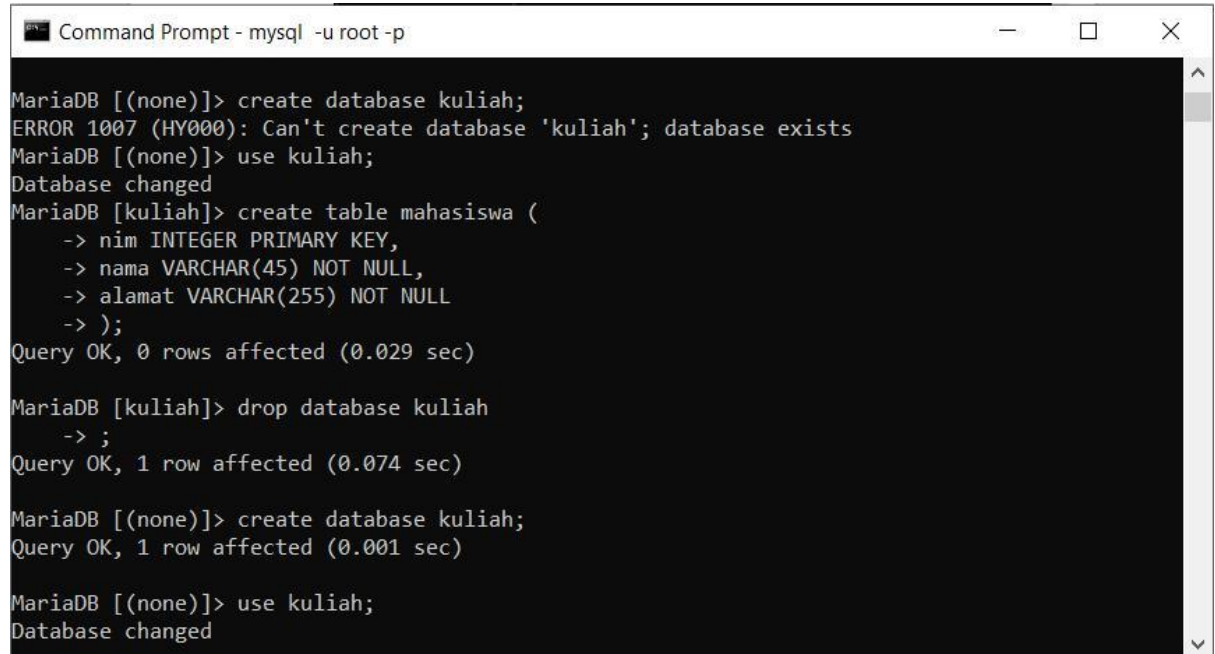


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PRAKTIKUM SISTEM BASIS DATA
MODUL 4
TUGAS

Implementasikan hasil rancangan database yang menangani database pada tugas modul 2 ke dalam program mysql

a) Membuat database kuliah



```
Command Prompt - mysql -u root -p

MariaDB [(none)]> create database kuliah;
ERROR 1007 (HY000): Can't create database 'kuliah'; database exists
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 (0.029 sec)

MariaDB [kuliah]> drop database kuliah
  -> ;
Query OK, 1 row affected (0.074 sec)

MariaDB [(none)]> create database kuliah;
Query OK, 1 row affected (0.001 sec)

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

b) Membuat table mahasiswa,dosen,mata_kuliah,ruang_kelas

```
Command Prompt - mysql -u root -p
Database changed
MariaDB [kuliah]> create table mahasiswa (
  -> nim_mhs INTEGER PRIMARY KEY,
  -> nama_mhs VARCHAR(45) NOT NULL,
  -> alamat_mhs VARCHAR(255) NOT NULL
  -> );
Query OK, 0 rows affected (0.033 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 (0.028 sec)

MariaDB [kuliah]> create table mata_kuliah (
  -> id_mk INTEGER PRIMARY KEY,
  -> nama_mk varchar(25) NOT NULL
  -> );
Query OK, 0 rows affected (0.027 sec)

Command Prompt - mysql -u root -p
MariaDB [kuliah]> create table ruang_kelas (
  -> id_ruangan INTEGER PRIMARY KEY,
  -> nama_ruangan VARCHAR(25) NOT NULL
  -> );
Query OK, 0 rows affected (0.027 sec)

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 (0.038 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)
```

```
Command Prompt - mysql -u root -p

MariaDB [kuliah]> drop table mahasiswa_has_dosen;
Query OK, 0 rows affected (0.020 sec)

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,
  -> PRIMARY KEY(nim_mhsFK,nip_dosenFK)
  -> );
Query OK, 0 rows affected (0.028 sec)

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 (0.028 sec)
```

c) Show semua table yang ada pada database kuliah

```
Command Prompt - mysql -u root -p

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 (0.001 sec)

MariaDB [kuliah]> describe mahasiswa;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| nim_mhs | int(11) | NO | PRI | NULL | |
| nama_mhs | varchar(45) | NO | | NULL | |
| alamat_mhs | varchar(255) | NO | | NULL | |
+-----+-----+-----+-----+-----+-----+
```

```
3 rows in set (0.026 sec)
```

```
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 (0.018 sec)
```

```
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 (0.018 sec)
```

```
ERROR 1146 (42S02): Table 'kuliah.ruang_kuliah' doesn't exist
MariaDB [kuliah]> describe ruang_kelas;
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id_ruangan     | int(11)       | NO   | PRI | NULL    |       |
| nama_ruangan   | varchar(25)   | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.017 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 (0.015 sec)

MariaDB [kuliah]> describe mahasiswa_has_dosen;
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id_mahasiswaFK | int(11)       | NO   | PRI | NULL    |       |
| id_dosenFK      | int(11)       | NO   | PRI | NULL    |       |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.015 sec)
```

MariaDB [kuliah]> describe mahasiswa_has_dosen;

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

2 rows in set (0.012 sec)

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 (0.016 sec)

MariaDB [kuliah]> _