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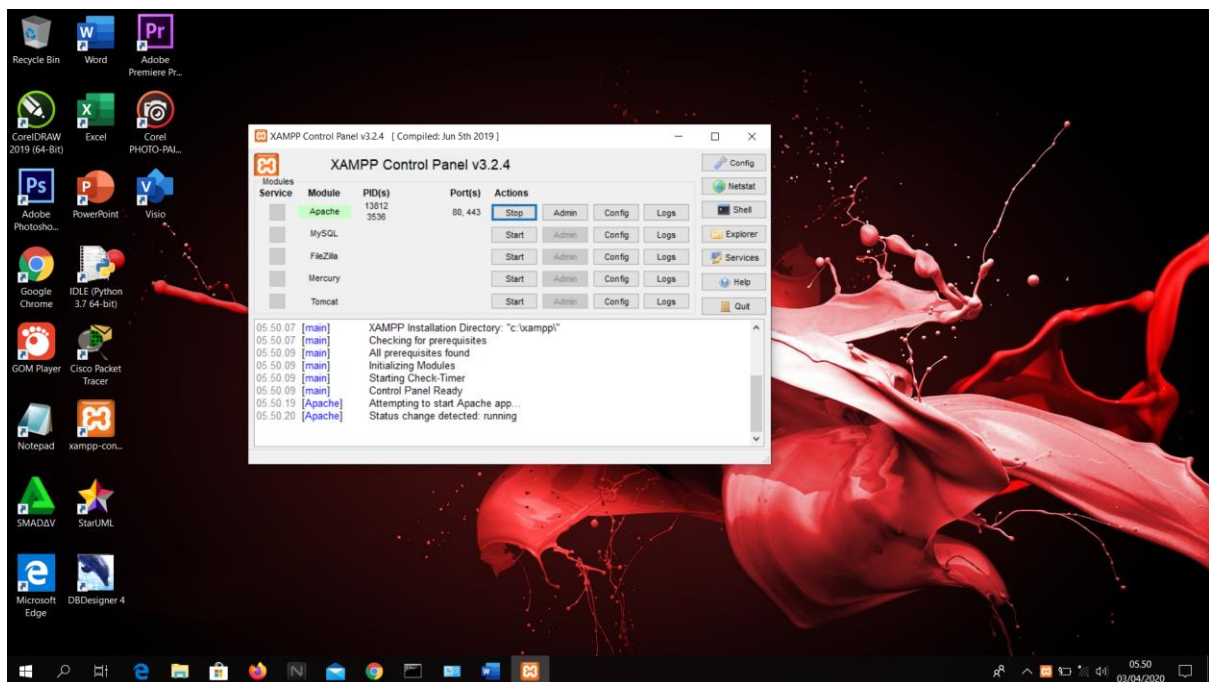
Kelas : C

Modul 4

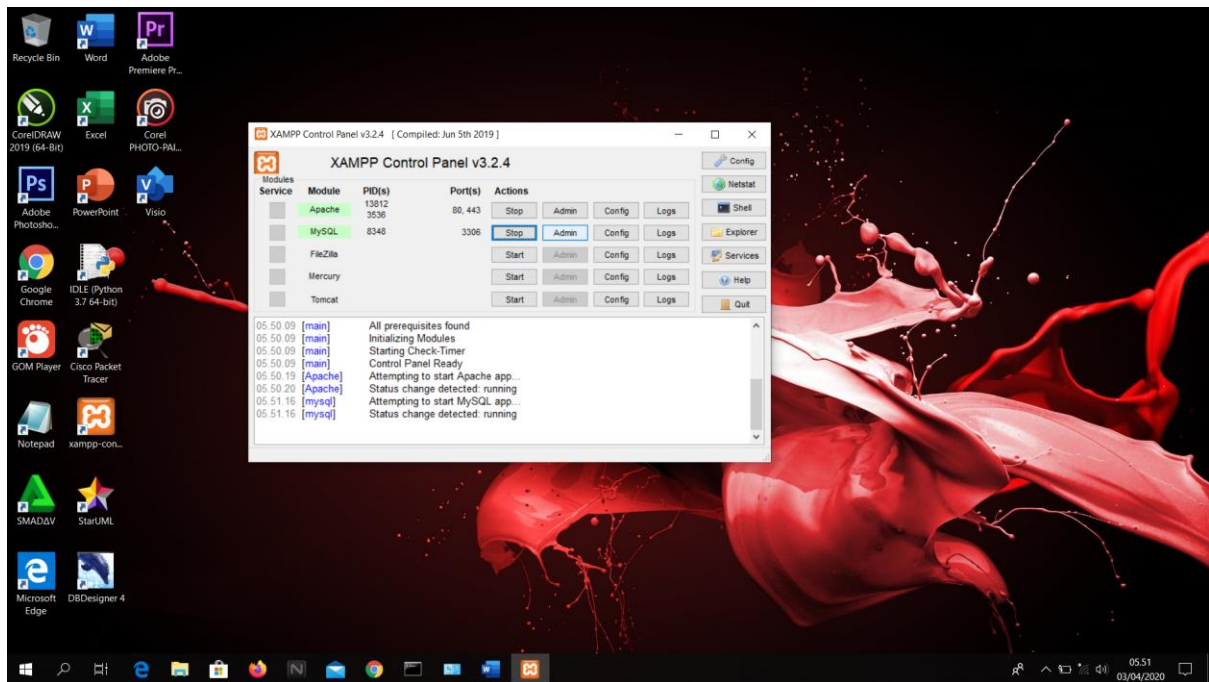
- Tugas

Implementasi hasil rancangan database yang menangani data kuliah pada modul 2 ke dalam program Mysql !

1. Menjalankan XAMPP Control Panel



2. Menjalankan Server Apache dan Mysql



3. Membuka commad prompt dan login sebagai root ke Mysql seperti di langkah Modul 1

```

C:\>cd xampp
C:\xampp>cd mysql
C:\xampp\mysql>cd bin
C:\xampp\mysql\bin>mysql -u root
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 0
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)]> show databases;
+-----+
| Database |
+-----+
| atm      |
| information_schema |
| mysql    |
| perbank  |
| performance_schema |
| phpmyadmin |
| test     |
+-----+
7 rows in set (0.001 sec)

MariaDB [(none)]>

```

4. Membuat database baru

```
Command Prompt - mysql -u root
C:\>cd xampp
C:\xampp>cd mysql
C:\xampp\mysql>cd bin
C:\xampp\mysql\bin>mysql -u root
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 8
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)]> show databases;
+-----+
| Database |
+-----+
| atm      |
| information_schema |
| mysql    |
| perbank  |
| performance_schema |
| phpmyadmin |
| test     |
+-----+
7 rows in set (0.001 sec)

MariaDB [(none)]> create database kuliah;
Query OK, 1 row affected (0.009 sec)

MariaDB [(none)]>
```

5. Menghubungkan ke dalam database yang telah dibuat

```
Command Prompt - mysql -u root
C:\>cd xampp
C:\xampp>cd mysql
C:\xampp\mysql>cd bin
C:\xampp\mysql\bin>mysql -u root
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 8
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)]> show databases;
+-----+
| Database |
+-----+
| atm      |
| information_schema |
| mysql    |
| perbank  |
| performance_schema |
| phpmyadmin |
| test     |
+-----+
7 rows in set (0.001 sec)

MariaDB [(none)]> create database kuliah;
Query OK, 1 row affected (0.009 sec)

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

6. Membuat tabel mahasiswa

```
Command Prompt - mysql -u root
C:\>cd xampp
C:\xampp>cd mysql
C:\xampp\mysql>cd bin
C:\xampp\mysql\bin>mysql -u root
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 8
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)]> show databases;
+-----+
| Database |
+-----+
| atm      |
| information_schema |
| mysql    |
| perbankan |
| performance_schema |
| phpmyadmin |
| test     |
+-----+
7 rows in set (0.001 sec)

MariaDB [(none)]> create database kuliah;
Query OK, 1 row affected (0.009 sec)

MariaDB [(none)]> use kuliah;
Database changed
MariaDB [kuliah]> create table mahasiswa(
  -> id_mhs INTEGER PRIMARY KEY,
  -> nama_mhs VARCHAR(45) NOT NULL,
  -> alamat_mhs VARCHAR(255) NOT NULL,
  -> ttl_mhs VARCHAR(50) NOT NULL,
  -> );
Query OK, 0 rows affected (0.049 sec)

MariaDB [kuliah]>
```

7. Membuat tabel dosen

```
Command Prompt - mysql -u root
C:\xampp\mysql>cd bin
C:\xampp\mysql\bin>mysql -u root
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 28
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)]> show databases;
+-----+
| Database |
+-----+
| atm      |
| information_schema |
| kuliah   |
| mysql    |
| perbankan |
| performance_schema |
| phpmyadmin |
| test     |
+-----+
8 rows in set (0.000 sec)

MariaDB [(none)]> use kuliah;
Database changed
MariaDB [kuliah]> create table dosen(
  -> id_dosen INTEGER PRIMARY KEY,
  -> nama_dosen VARCHAR(45) NOT NULL,
  -> alamat_dosen VARCHAR(255) NOT NULL,
  -> ttl_dosen VARCHAR(50) NOT NULL,
  -> jenis_kelamin_dosen VARCHAR(30) 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 7
MariaDB [kuliah]> create table dosen(
  -> id_dosen INTEGER PRIMARY KEY,
  -> nama_dosen VARCHAR(45) NOT NULL,
  -> alamat_dosen VARCHAR(255) NOT NULL,
  -> ttl_dosen VARCHAR(50) NOT NULL,
  -> jenis_kelamin_dosen VARCHAR(30) NOT NULL);
Query OK, 0 rows affected (0.014 sec)

MariaDB [kuliah]>
```

8. Membuat tabel mata_kuliah

```
Command Prompt - mysql -u root
Microsoft Windows [Version 10.0.17763.1098]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\Users\ACER>cd..
C:\Users>cd..
C:\>cd xampp
C:\xampp>cd mysql
C:\xampp\mysql>cd bin
C:\xampp\mysql\bin>mysql -u root
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 47
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)]> use kuliah;
Database changed
MariaDB [kuliah]> create table mata_kuliah(
  -> nama_matkul varchar(45) not null,
  -> kode_matkul varchar(45) primary key,
  -> dosen_pengampu varchar(255) not null);
Query OK, 0 rows affected (0.012 sec)

MariaDB [kuliah]>
```

9. Membuat table ruang_kelas

```
Command Prompt - mysql -u root
Microsoft Windows [Version 10.0.17763.1098]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\Users\ACER>cd..
C:\Users>cd..
C:\>cd xampp
C:\xampp>cd mysql
C:\xampp\mysql>cd bin
C:\xampp\mysql\bin>mysql -u root
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 47
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)]> use kuliah;
Database changed
MariaDB [kuliah]> create table mata_kuliah(
  -> nama_matkul varchar(45) not null,
  -> kode_matkul varchar(45) primary key,
  -> dosen_pengampu varchar(255) not null);
Query OK, 0 rows affected (0.012 sec)

MariaDB [kuliah]> create table ruang_kelas(
  -> kode_ruangkelas integer primary key,
  -> kapasitas_ruangkelas integer not null);
Query OK, 0 rows affected (0.051 sec)

MariaDB [kuliah]>
```

10. Membuat table mahasiswa_has_matakuliah

```
Command Prompt - mysql -u root
C:\xampp\mysql>cd bin
C:\xampp\mysql\bin>mysql -u root
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 47
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)]> use kuliah;
Database changed
MariaDB [kuliah]> create table mata_kuliah(
  -> nama_matkul varchar(45) not null,
  -> kode_matkul varchar(45) primary key,
  -> dosen_pengampu varchar(255) not null);
Query OK, 0 rows affected (0.012 sec)

MariaDB [kuliah]> create table ruang_kelas(
  -> kode_ruangkelas integer primary key,
  -> kapasitas_ruangkelas integer not null);
Query OK, 0 rows affected (0.051 sec)

MariaDB [kuliah]> create table mahasiswa_has_dosen(
  -> id_mhsFK integer references mahasiswa(id_mhs)
  -> on delete cascade on update cascade
  -> on delete cascade on update cascade
  -> create table mahasiswa_has_dosen(
  -> kapasitas_ruangkelas integer 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 'on delete cascade on update cascade
create table mahasiswa_has_dosen(
kapasitas.' at line 4
MariaDB [kuliah]> create table mahasiswa_has_dosen(
  -> id_mhsFK integer references mahasiswa(id_mhs)
  -> on delete cascade on update cascade,
  -> on delete cascade on update cascade,
  -> kode_matakuliahFK integer references mata_kuliah(kode_matakuliah)
  -> on delete cascade on update cascade,
  -> primary key(id_mhsFK, kode_matakuliahFK);
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 6
MariaDB [kuliah]> create table mahasiswa_has_matakuliah(
  -> nim_mahasiswaFK varchar(45) references mahasiswa(nim_mahasiswa)
  -> on delete cascade on update cascade,
  -> kode_matkulFK varchar(45) references mata_kuliah(kode_matakuliah)
  -> on delete cascade on update cascade,
  -> primary key(nim_mahasiswaFK, kode_matkulFK));
Query OK, 0 rows affected (0.025 sec)

MariaDB [kuliah]>
```

11. Mengecek hasil pembuatan database

```
Command Prompt - mysql -u root
Query OK, 0 rows affected (0.051 sec)

MariaDB [kuliah]> create table mahasiswa_has_dosen(
  -> id_mhsFK integer references mahasiswa(id_mhs)
  -> on delete cascade on update cascade
  -> on delete cascade on update cascade
  -> create table mahasiswa_has_dosen(
  -> kapasitas_ruangkelas integer 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 'on delete cascade on update cascade
create table mahasiswa_has_dosen(
kapasitas.' at line 4
MariaDB [kuliah]> create table mahasiswa_has_dosen(
  -> id_mhsFK integer references mahasiswa(id_mhs)
  -> on delete cascade on update cascade,
  -> on delete cascade on update cascade,
  -> kode_matakuliahFK integer references mata_kuliah(kode_matakuliah)
  -> on delete cascade on update cascade,
  -> primary key(id_mhsFK, kode_matakuliahFK);
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 6
MariaDB [kuliah]> create table mahasiswa_has_matakuliah(
  -> nim_mahasiswaFK varchar(45) references mahasiswa(nim_mahasiswa)
  -> on delete cascade on update cascade,
  -> kode_matkulFK varchar(45) references mata_kuliah(kode_matakuliah)
  -> on delete cascade on update cascade,
  -> primary key(nim_mahasiswaFK, kode_matkulFK));
Query OK, 0 rows affected (0.025 sec)

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

MariaDB [kuliah]> describe mahasiswa;
+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+
| id_mhs | int(11) | NO | PRI | NULL | |
| nama_mhs | varchar(45) | NO | | NULL | |
| alamat_mhs | varchar(255) | NO | | NULL | |
| ttl_mhs | varchar(50) | NO | | NULL | |
+-----+
4 rows in set (0.009 sec)

MariaDB [kuliah]>
```

12. Melihat struktur mahasiswa

```
Command Prompt - mysql -u root
-> id_mhsFK integer references mahasiswa(id_mhs)
-> on delete cascade on update cascade,
-> kode_matakuliahFK integer references mata_kuliah(kode_matakuliah)
-> on delete cascade on update cascade,
-> primary key(id_mhsFK, kode_matakuliahFK);
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 6
MariaDB [kuliah]> create table mahasiswa_has_matakuliah(
-> nim_mahasiswaFK varchar(45) references mahasiswa(nim_mahasiswa)
-> on delete cascade on update cascade,
-> kode_matakuliahFK varchar(45) references mata_kuliah(kode_matakuliah)
-> on delete cascade on update cascade,
-> primary key(nim_mahasiswaFK, kode_matakuliahFK));
Query OK, 0 rows affected (0.025 sec)

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

MariaDB [kuliah]> describe mahasiswa;
+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+
| id_mhs | int(11) | NO | PRI | NULL | |
| nama_mhs | varchar(45) | NO | | NULL | |
| alamat_mhs | varchar(255) | NO | | NULL | |
| ttl_mhs | varchar(50) | NO | | NULL | |
+-----+
4 rows in set (0.009 sec)

MariaDB [kuliah]> describe dosen;
+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+
| id_dosen | int(11) | NO | PRI | NULL | |
| nama_dosen | varchar(45) | NO | | NULL | |
| alamat_dosen | varchar(255) | NO | | NULL | |
| ttl_dosen | varchar(50) | NO | | NULL | |
| jenis_kelamin_dosen | varchar(30) | NO | | NULL | |
+-----+
5 rows in set (0.009 sec)

MariaDB [kuliah]>
```

13. Melihat struktur dosen

```
Command Prompt - mysql -u root
-> id_mhsFK integer references mahasiswa(id_mhs)
-> on delete cascade on update cascade,
-> kode_matakuliahFK integer references mata_kuliah(kode_matakuliah)
-> on delete cascade on update cascade,
-> primary key(id_mhsFK, kode_matakuliahFK);
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 6
MariaDB [kuliah]> create table mahasiswa_has_matakuliah(
-> nim_mahasiswaFK varchar(45) references mahasiswa(nim_mahasiswa)
-> on delete cascade on update cascade,
-> kode_matakuliahFK varchar(45) references mata_kuliah(kode_matakuliah)
-> on delete cascade on update cascade,
-> primary key(nim_mahasiswaFK, kode_matakuliahFK));
Query OK, 0 rows affected (0.025 sec)

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

MariaDB [kuliah]> describe mahasiswa;
+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+
| id_mhs | int(11) | NO | PRI | NULL | |
| nama_mhs | varchar(45) | NO | | NULL | |
| alamat_mhs | varchar(255) | NO | | NULL | |
| ttl_mhs | varchar(50) | NO | | NULL | |
+-----+
4 rows in set (0.009 sec)

MariaDB [kuliah]> describe dosen;
+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+
| id_dosen | int(11) | NO | PRI | NULL | |
| nama_dosen | varchar(45) | NO | | NULL | |
| alamat_dosen | varchar(255) | NO | | NULL | |
| ttl_dosen | varchar(50) | NO | | NULL | |
| jenis_kelamin_dosen | varchar(30) | NO | | NULL | |
+-----+
5 rows in set (0.009 sec)

MariaDB [kuliah]>
```

14. Melihat struktur mata kuliah

```
Command Prompt - mysql -u root
-> primary key(nim_mahasiswaFK, kode_matkulFK));
Query OK, 0 rows affected (0.025 sec)

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

MariaDB [kuliah]> describe mahasiswa;
+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+
| id_mhs     | int(11)   | NO   | PRI | NULL    |       |
| nama_mhs   | varchar(45) | NO   |     | NULL    |       |
| alamat_mhs | varchar(255) | NO   |     | NULL    |       |
| ttl_mhs    | varchar(50) | NO   |     | NULL    |       |
+-----+
4 rows in set (0.009 sec)

MariaDB [kuliah]> describe dosen;
+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+
| id_dosen   | int(11)   | NO   | PRI | NULL    |       |
| nama_dosen | varchar(45) | NO   |     | NULL    |       |
| alamat_dosen | varchar(255) | NO   |     | NULL    |       |
| ttl_dosen  | varchar(50) | NO   |     | NULL    |       |
| jenis_kelamin_dosen | varchar(30) | NO   |     | NULL    |       |
+-----+
5 rows in set (0.009 sec)

MariaDB [kuliah]> describe mata_kuliah
-> ;
+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+
| nama_matkul | varchar(45) | NO   |     | NULL    |       |
| kode_matkul | varchar(45) | NO   | PRI | NULL    |       |
| dosen_pengampu | varchar(255) | NO   |     | NULL    |       |
+-----+
3 rows in set (0.011 sec)

MariaDB [kuliah]>
```

15. Melihat struktur ruang kelas

```
Command Prompt - mysql -u root
+-----+
| Tables_in_kuliah |
+-----+
| mahasiswa         |
| mahasiswa_has_matakuliah |
| mata_kuliah       |
| ruang_kelas       |
+-----+
5 rows in set (0.001 sec)

MariaDB [kuliah]> describe mahasiswa;
+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+
| id_mhs     | int(11)   | NO   | PRI | NULL    |       |
| nama_mhs   | varchar(45) | NO   |     | NULL    |       |
| alamat_mhs | varchar(255) | NO   |     | NULL    |       |
| ttl_mhs    | varchar(50) | NO   |     | NULL    |       |
+-----+
4 rows in set (0.009 sec)

MariaDB [kuliah]> describe dosen;
+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+
| id_dosen   | int(11)   | NO   | PRI | NULL    |       |
| nama_dosen | varchar(45) | NO   |     | NULL    |       |
| alamat_dosen | varchar(255) | NO   |     | NULL    |       |
| ttl_dosen  | varchar(50) | NO   |     | NULL    |       |
| jenis_kelamin_dosen | varchar(30) | NO   |     | NULL    |       |
+-----+
5 rows in set (0.009 sec)

MariaDB [kuliah]> describe mata_kuliah
-> ;
+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+
| nama_matkul | varchar(45) | NO   |     | NULL    |       |
| kode_matkul | varchar(45) | NO   | PRI | NULL    |       |
| dosen_pengampu | varchar(255) | NO   |     | NULL    |       |
+-----+
3 rows in set (0.011 sec)

MariaDB [kuliah]> describe ruang_kelas;
+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+
| kode_ruangkelas | int(11) | NO   | PRI | NULL    |       |
| kapasitas_ruangkelas | int(11) | NO   |     | NULL    |       |
+-----+
2 rows in set (0.010 sec)

MariaDB [kuliah]>
```