

Modul : 4

```

C:\Windows\system32\cmd.exe - mysql -u root -p
Microsoft Windows [Version 6.1.7600]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\LABSI-7>cd..

C:\Users>cd..

C:\>cd C:/xampp/mysql/bin

C:\xampp\mysql\bin>login
'login' is not recognized as an internal or external command,
operable program or batch file.

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 2
Server version: 10.1.37-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)]>
MariaDB [(none)]> create database perbankan;
Query OK, 1 row affected (0.00 sec)

MariaDB [(none)]> use perbankan;
Database changed
MariaDB [perbankan]> CREATE TABLE nasabah(
-> id_nasabah INTEGER PRIMARY KEY,
-> nama_nasabah VARCHAR(45) NOT NULL,
-> alamat_nasabah VARCHAR(255) NOT NULL);
Query OK, 0 rows affected (0.22 sec)

MariaDB [perbankan]> CREATE TABLE cabang_bank(
-> kode_cabang VARCHAR(20) PRIMARY KEY,
-> nama_cabang VARCHAR(45) UNIQUE NOT NULL,
-> alamat_cabang VARCHAR(255) NOT NULL);
Query OK, 0 rows affected (0.23 sec)

MariaDB [perbankan]> show tables;
+-----+
| Tables_in_perbankan |
+-----+
| cabang_bank         |
| nasabah             |
+-----+
2 rows in set (0.00 sec)

MariaDB [perbankan]> CREATE TABLE rekening(
-> no_rekening INTEGER PRIMARY KEY,
-> kode_cabangFK VARCHAR(20) REFERENCES cabang_bank(kode_cabang) ON DELETE C
ASCASE ON UPDATE CASCADE,
-> pin VARCHAR(20) DEFAULT '1234' NOT NULL,
-> saldo INTEGER DEFAULT 0 NOT NULL);
Query OK, 0 rows affected (0.18 sec)

```

```
C:\Windows\system32\cmd.exe - mysql -u root -p

MariaDB [perbankan]> CREATE TABLE rekening(
  -> no_rekening INTEGER PRIMARY KEY,
  -> kode_cabangFK VARCHAR(20) REFERENCES cabang_bank(kode_cabang) ON DELETE C
ASCAD E ON UPDATE CASCADE,
  -> pin VARCHAR(20) DEFAULT '1234' NOT NULL,
  -> saldo INTEGER DEFAULT 0 NOT NULL);
Query OK, 0 rows affected (0.18 sec)

MariaDB [perbankan]> CREATE TABLE transaksi(
  -> no_transaksi SERIAL PRIMARY KEY,
  -> id_nasabahFK INTEGER REFERENCES nasabah(id_nasabah) ON DELETE SET NULL ON
UPDATE CASCADE,
  -> no_rekeningFK INTEGER REFERENCES rekening(no_rekening) ON DELETE SET NULL
ON UPDATE CASCADE,
  -> jenis_transaksi VARCHAR(20) DEFAULT 'debit' NOT NULL,
  -> tanggal DATETIME NOT NULL DEFAULT CURRENT_TIMESTAMP,
  -> jumlah INTEGER NOT NULL CHECK (jumlah>=20000)
  -> );
Query OK, 0 rows affected (0.22 sec)

MariaDB [perbankan]> CREATE TABLE nasabah_has_rekening(
  -> id_nasabahFK INTEGER REFERENCES nasabah(id_nasabah) ON DELETE CASCADE ON
UPDATE CASCADE,
  -> no_rekeningFK INTEGER REFERENCES rekening(no_rekening) ON DELETE CASCADE
ON UPDATE CASCADE,
  -> PRIMARY KEY(id_nasabahFK, no_rekeningFK)
  -> );
Query OK, 0 rows affected (0.20 sec)

  -> show tables;
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 'l
show tables' at line 1
MariaDB [perbankan]> show tables;
+-----+
| Tables_in_perbankan |
+-----+
| cabang_bank         |
| nasabah             |
| nasabah_has_rekening |
| rekening            |
| transaksi           |
+-----+
5 rows in set (0.00 sec)

MariaDB [perbankan]> describe nasabah;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id_nasabah | int(11)   | NO   | PRI | NULL    |       |
| nama_nasabah | varchar(45) | NO   |     | NULL    |       |
| alamat_nasabah | varchar(255) | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.01 sec)

MariaDB [perbankan]>
```

localhost / 127.0.0.1 / perbankan | phpMyAdmin 4.8.4 - Windows Internet Explorer

http://localhost/phpmyadmin/db_structure.php?db=perbankan

Server: 127.0.0.1 • Basis data: perbankan

Struktur SQL Cari Kueri Ekspor Impor Operasi Hak Akses Routine Event Trigger Pelacakan

Desainer Tengah kolom

Filters

Mengandung kata:

Tabel	Tindakan	Baris	Jenis	Penyortiran	Ukuran	Beban
<input type="checkbox"/> cabang_bank	<input type="checkbox"/> Jelajahi <input type="checkbox"/> Struktur <input type="checkbox"/> Cari <input type="checkbox"/> Tambahkan <input type="checkbox"/> Kosongkan <input type="checkbox"/> Hapus	0	InnoDB	latin1_swedish_ci	32 KB	-
<input type="checkbox"/> nasabah	<input type="checkbox"/> Jelajahi <input type="checkbox"/> Struktur <input type="checkbox"/> Cari <input type="checkbox"/> Tambahkan <input type="checkbox"/> Kosongkan <input type="checkbox"/> Hapus	0	InnoDB	latin1_swedish_ci	16 KB	-
<input type="checkbox"/> nasabah_has_rekening	<input type="checkbox"/> Jelajahi <input type="checkbox"/> Struktur <input type="checkbox"/> Cari <input type="checkbox"/> Tambahkan <input type="checkbox"/> Kosongkan <input type="checkbox"/> Hapus	0	InnoDB	latin1_swedish_ci	16 KB	-
<input type="checkbox"/> rekening	<input type="checkbox"/> Jelajahi <input type="checkbox"/> Struktur <input type="checkbox"/> Cari <input type="checkbox"/> Tambahkan <input type="checkbox"/> Kosongkan <input type="checkbox"/> Hapus	0	InnoDB	latin1_swedish_ci	16 KB	-
<input type="checkbox"/> transaksi	<input type="checkbox"/> Jelajahi <input type="checkbox"/> Struktur <input type="checkbox"/> Cari <input type="checkbox"/> Tambahkan <input type="checkbox"/> Kosongkan <input type="checkbox"/> Hapus	0	InnoDB	latin1_swedish_ci	16 KB	-
5 tabel	Jumlah	0	InnoDB	latin1_swedish_ci	96 KB	0 B

Pilih Semua Dengan pilihan:

Cetak Kamus data

Buat tabel

Nama: Jumlah kolom: 4

Error on page.

Internet | Protected Mode: On

8:01 22/03/2019

Tugas 1

```
Command Prompt - mysql -u root -p
Microsoft Windows [Version 10.0.14393]
(c) 2016 Microsoft Corporation. All rights reserved.

C:\Users\USER>cd..
C:\Users>cd..
C:\>cd C:/xampp/mysql/bin

C:\xampp\mysql\bin>login
'login' is not recognized as an internal or external command,
operable program or batch file.

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 28
Server version: 10.1.28-MariaDB mariadb.org binary distribution

Copyright (c) 2000, 2017, Oracle, MariaDB Corporation Ab and others.

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

MariaDB [(none)]> create database kuliah;
Query OK, 1 row affected (0.00 sec)

MariaDB [(none)]> use kuliah;
Database changed
MariaDB [kuliah]> CREATE TABLE dosen(
  -> nip_dosen INTEGER PRIMARY KEY,
  -> nama_dosen VARCHAR(45) NOT NULL,
  -> alamat_dosen VARCHAR(45) NOT NULL);
Query OK, 0 rows affected (0.19 sec)

MariaDB [kuliah]> CREATE TABLE matkul(
  -> kode_matkul INTEGER PRIMARY KEY,
  -> nama_matkul VARCHAR(45) NOT NULL,
  -> jumlah_matkul INTEGER DEFAULT 0 NOT NULL);
Query OK, 0 rows affected (0.18 sec)

MariaDB [kuliah]> CREATE TABLE mahasiswa(
  -> NIM_mahasiswa VARCHAR(20) PRIMARY KEY,
  -> nama_mahasiswa VARCHAR(45) NOT NULL,
  -> alamat_mahasiswa VARCHAR(45) NOT NULL,
  -> kode_ruangFK INTEGER REFERENCES ruang(kode_ruang) ON DELETE SET NULL ON UPDATE CASCADE);
Query OK, 0 rows affected (0.20 sec)
```

```
Command Prompt - mysql -u root -p
MariaDB [kuliah]> CREATE TABLE mahasiswa(
  -> NIM_mahasiswa VARCHAR(20) PRIMARY KEY,
  -> nama_mahasiswa VARCHAR(45) NOT NULL,
  -> alamat_mahasiswa VARCHAR(45) NOT NULL,
  -> kode_ruangFK INTEGER REFERENCES ruang(kode_ruang) ON DELETE SET NULL ON UPDATE CASCADE);
Query OK, 0 rows affected (0.20 sec)

MariaDB [kuliah]> CREATE TABLE ruang(
  -> kode_ruang INTEGER PRIMARY KEY,
  -> nama_ruang VARCHAR(45) NOT NULL,
  -> kapasitas_ruang INTEGER DEFAULT 0 NOT NULL);
Query OK, 0 rows affected (0.21 sec)

MariaDB [kuliah]> CREATE TABLE dosen_has_mahasiswa(
  -> nip_dosenFK INTEGER REFERENCES dosen(nip_dosen) ON DELETE SET NULL ON UPDATE CASCADE,
  -> NIM_mahasiswaFK VARCHAR(20) REFERENCES mahasiswa(NIM_mahasiswa) ON DELETE SET NULL ON UPDATE CASCADE);
Query OK, 0 rows affected (0.22 sec)

MariaDB [kuliah]> CREATE TABLE dosen_has_matkul(
  -> nip_dosenFK INTEGER REFERENCES dosen(nip_dosen) ON DELETE SET NULL ON UPDATE CASCADE,
  -> kode_matkulFK INTEGER REFERENCES matkul(kode_matkul) ON DELETE SET NULL ON UPDATE CASCADE);
Query OK, 0 rows affected (0.21 sec)

MariaDB [kuliah]> CREATE TABLE mahasiswa_has_matkul(
  -> NIM_mahasiswaFK VARCHAR(20) REFERENCES mahasiswa(NIM_mahasiswa) ON DELETE SET NULL ON UPDATE CASCADE,
  -> kode_matkulFK INTEGER REFERENCES matkul(kode_matkul) ON DELETE SET NULL ON UPDATE CASCADE);
Query OK, 0 rows affected (0.16 sec)

MariaDB [kuliah]> show tables;
+-----+
| Tables_in_kuliah |
+-----+
| dosen             |
| dosen_has_mahasiswa |
| dosen_has_matkul  |
| mahasiswa         |
| mahasiswa_has_matkul |
| matkul            |
| ruang             |
+-----+
7 rows in set (0.00 sec)

MariaDB [kuliah]> describe mahasiswa;
+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+
| NIM_mahasiswa | varchar(20) | NO | PRIMARY | NULL |
| nama_mahasiswa | varchar(45) | NO | | NULL |
| alamat_mahasiswa | varchar(45) | NO | | NULL |
| kode_ruangFK | integer | YES | | NULL |
```

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

MariaDB [kuliah]> describe mahasiswa;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| NIM_mahasiswa | varchar(20) | NO | PRI | NULL | |
| nama_mahasiswa | varchar(45) | NO | | NULL | |
| alamat_mahasiswa | varchar(45) | NO | | NULL | |
| kode_ruangFK | int(11) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.01 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(45) | NO | | NULL | |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.01 sec)

MariaDB [kuliah]> describe ruang;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| kode_ruang | int(11) | NO | PRI | NULL | |
| nama_ruang | varchar(45) | NO | | NULL | |
| kapasitas_ruang | int(11) | NO | | 0 | |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.01 sec)

MariaDB [kuliah]> describe matkul;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| kode_matkul | int(11) | NO | PRI | NULL | |
| nama_matkul | varchar(45) | NO | | NULL | |
| jumlah_matkul | int(11) | NO | | 0 | |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.01 sec)

MariaDB [kuliah]> .
```

localhost / 127.0.0.1 / kuliah | php: x

localhost/phpmyadmin/db_structure.php?db=kuliah

Server: 127.0.0.1 Database: kuliah

Structure SQL Search Query Export Import Operations Privileges Routines Events More

Filters

Containing the word:

Table	Action	Rows	Type	Collation	Size	Overhead
dosen	Structure Browse Search Insert Empty Drop	0	InnoDB	latin1_swedish_ci	16 K18	-
dosen_has_mahasiswa	Structure Browse Search Insert Empty Drop	0	InnoDB	latin1_swedish_ci	16 K18	-
dosen_has_matkul	Structure Browse Search Insert Empty Drop	0	InnoDB	latin1_swedish_ci	16 K18	-
mahasiswa	Structure Browse Search Insert Empty Drop	0	InnoDB	latin1_swedish_ci	16 K18	-
mahasiswa_has_matkul	Structure Browse Search Insert Empty Drop	0	InnoDB	latin1_swedish_ci	16 K18	-
matkul	Structure Browse Search Insert Empty Drop	0	InnoDB	latin1_swedish_ci	16 K18	-
ruang	Structure Browse Search Insert Empty Drop	0	InnoDB	latin1_swedish_ci	16 K18	-
7 tables	Sum	0	InnoDB	latin1_swedish_ci	112 K18	0 8

Check all With selected:

Print Data dictionary

Create table

Name: Number of columns: 4

Go

Console

Tugas 2

```
Command Prompt - mysql -u root -p
Microsoft Windows [Version 10.0.14393]
(c) 2016 Microsoft Corporation. All rights reserved.

C:\Users\USER>cd..

C:\Users>cd..

C:\>cd C:/xampp/mysql/bin

C:\xampp\mysql\bin>login
'login' is not recognized as an internal or external command,
operable program or batch file.

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 3
Server version: 10.1.28-MariaDB mariadb.org binary distribution

Copyright (c) 2000, 2017, Oracle, MariaDB Corporation Ab and others.

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

MariaDB [(none)]> create database Apotek;
ERROR 1007 (HY000): Can't create database 'apotek'; database exists
MariaDB [(none)]> create database Apotek1;
Query OK, 1 row affected (0.04 sec)

MariaDB [(none)]> use Apotek1;
Database changed
MariaDB [Apotek1]> CREATE TABLE pegawai(
-> id_pegawai INTEGER PRIMARY KEY,
-> nama_pegawai VARCHAR(45) NOT NULL,
-> alamat_pegawai VARCHAR(45) NOT NULL);
Query OK, 0 rows affected (0.19 sec)

MariaDB [Apotek1]> CREATE TABLE pelanggan(
-> id_pelanggan INTEGER PRIMARY KEY,
-> nama_pelanggan VARCHAR(45) NOT NULL,
-> alamat_pelanggan VARCHAR(45) NOT NULL);
Query OK, 0 rows affected (0.17 sec)

MariaDB [Apotek1]> CREATE TABLE obat(
-> kode_obat INTEGER PRIMARY KEY,
-> nama_obat VARCHAR(45) NOT NULL,
-> harga_obat INTEGER DEFAULT 0 NOT NULL);
Query OK, 0 rows affected (0.16 sec)
```

```
Command Prompt - mysql -u root -p
MariaDB [Apotek1]> CREATE TABLE pegawai_has_pelanggan(
-> id_pegawaiFK INTEGER REFERENCES pegawai(id_pegawai) ON DELETE CASCADE ON UPDATE CASCADE,
-> id_pelangganFK INTEGER REFERENCES pelanggan(id_pelanggan) ON DELETE CASCADE ON UPDATE CASCADE);
Query OK, 0 rows affected (0.45 sec)

MariaDB [Apotek1]> CREATE TABLE pelanggan_has_obat(
-> id_pelangganFK INTEGER REFERENCES pelanggan(id_pelanggan) ON DELETE CASCADE ON UPDATE CASCADE,
-> kode_obatFK INTEGER REFERENCES obat(kode_obat) ON DELETE CASCADE ON UPDATE CASCADE);
Query OK, 0 rows affected (0.18 sec)

MariaDB [Apotek1]> show tables;
+-----+
| Tables_in_apotek1 |
+-----+
| obat              |
| pegawai            |
| pegawai_has_pelanggan |
| pelanggan          |
| pelanggan_has_obat |
+-----+
5 rows in set (0.00 sec)

MariaDB [Apotek1]> describe pegawai;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id_pegawai | int(11) | NO | PRI | NULL | |
| nama_pegawai | varchar(45) | NO | | NULL | |
| alamat_pegawai | varchar(45) | NO | | NULL | |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.01 sec)

MariaDB [Apotek1]> describe pelanggan;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id_pelanggan | int(11) | NO | PRI | NULL | |
| nama_pelanggan | varchar(45) | NO | | NULL | |
| alamat_pelanggan | varchar(45) | NO | | NULL | |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.01 sec)

MariaDB [Apotek1]> describe obat
-> ;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
```

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

Tables_in_apotek1
+-----+
| obat |
| pegawai |
| pegawai_has_pelanggan |
| pelanggan |
| pelanggan_has_obat |
+-----+
5 rows in set (0.00 sec)

MariaDB [Apotek1]> describe pegawai;
+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+
| id_pegawai | int(11) | NO | PRI | NULL | |
| nama_pegawai | varchar(45) | NO | | NULL | |
| alamat_pegawai | varchar(45) | NO | | NULL | |
+-----+
3 rows in set (0.01 sec)

MariaDB [Apotek1]> describe pelanggan;
+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+
| id_pelanggan | int(11) | NO | PRI | NULL | |
| nama_pelanggan | varchar(45) | NO | | NULL | |
| alamat_pelanggan | varchar(45) | NO | | NULL | |
+-----+
3 rows in set (0.01 sec)

MariaDB [Apotek1]> describe obat
> ;
+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+
| kode_obat | int(11) | NO | PRI | NULL | |
| nama_obat | varchar(45) | NO | | NULL | |
| harga_obat | int(11) | NO | | 0 | |
+-----+
3 rows in set (0.01 sec)

MariaDB [Apotek1]>
```

localhost / 127.0.0.1 / apotek1 | X

localhost/phpmyadmin/db_structure.php?db=&db=apotek1

Server: 127.0.0.1 > Database: apotek1

Structure SQL Search Query Export Import Operations Privileges Routines Events More

Filters

Containing the word:

Table	Action	Rows	Type	Collation	Size	Overhead
obat	☆ Browse Structure Search Insert Empty Drop	0	InnoDB	latin1_swedish_ci	16 K18	-
pegawai	☆ Browse Structure Search Insert Empty Drop	0	InnoDB	latin1_swedish_ci	16 K18	-
pegawai_has_pelanggan	☆ Browse Structure Search Insert Empty Drop	0	InnoDB	latin1_swedish_ci	16 K18	-
pelanggan	☆ Browse Structure Search Insert Empty Drop	0	InnoDB	latin1_swedish_ci	16 K18	-
pelanggan_has_obat	☆ Browse Structure Search Insert Empty Drop	0	InnoDB	latin1_swedish_ci	16 K18	-
5 tables	Sum		InnoDB	latin1_swedish_ci	80 K18	0 B

Check all With selected:

Print Data dictionary

Create table

Name: Number of columns: 4

Go

Console