

Nama : Veny Fitriana Isnaini

NIM : L200180045

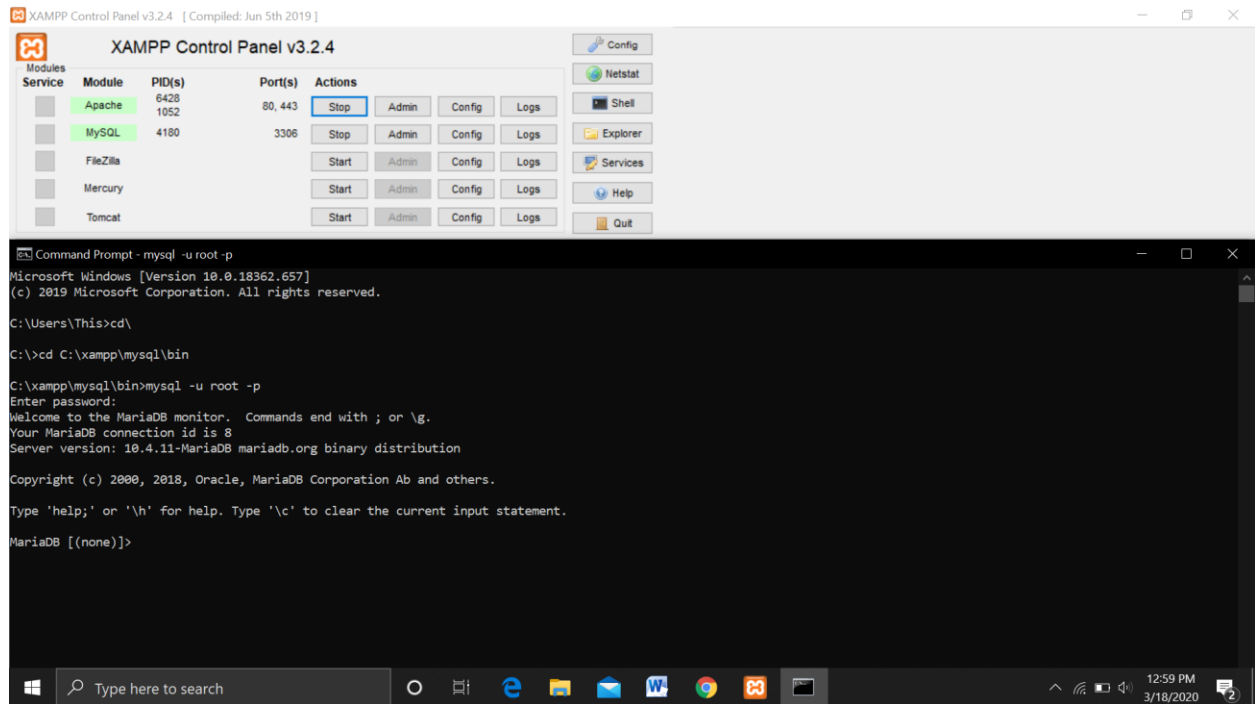
Kelas : B

Modul-4

Data Definition Language(DDL)

Langkah-langkah praktikum

1.



2. Create tabel “Perbankan”

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

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
  -> );
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 'NULL,
alamat_nasabah VARCHAR(255) NOT NULL
)' at line 3
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 (0.055 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 (0.051 sec)

MariaDB [perbankan]> CREATE TABLE rekening(
  -> no_rekening INTEGER PRIMARY KEY,
  -> kode_cabangFK VARCHAR(20) REFERENCES cabang_bank(kode_cabang) ON DELETE CASCADE ON UPDATE CASCADE,
  -> pin VARCHAR(20) DEFAULT '1234' NOT NULL,
  -> saldo INTEGER DEFAULT 0 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 6
MariaDB [perbankan]> CREATE TABLE rekening(
  -> no_rekening INTEGER PRIMARY KEY,
  -> kode_cabangFK VARCHAR(20) REFERENCES cabang_bank(kode_cabang) ON DELETE CASCADE ON UPDATE CASCADE,
  -> pin VARCHAR(20) DEFAULT '1234' NOT NULL,
  -> saldo INTEGER DEFAULT 0 NOT NULL
  -> );
Query OK, 0 rows affected (0.051 sec)

MariaDB [perbankan]> CREATE TABLE transaksi(
```

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

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>00000)
  -> );
Query OK, 0 rows affected (0.049 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 (0.053 sec)

MariaDB [perbankan]>
```

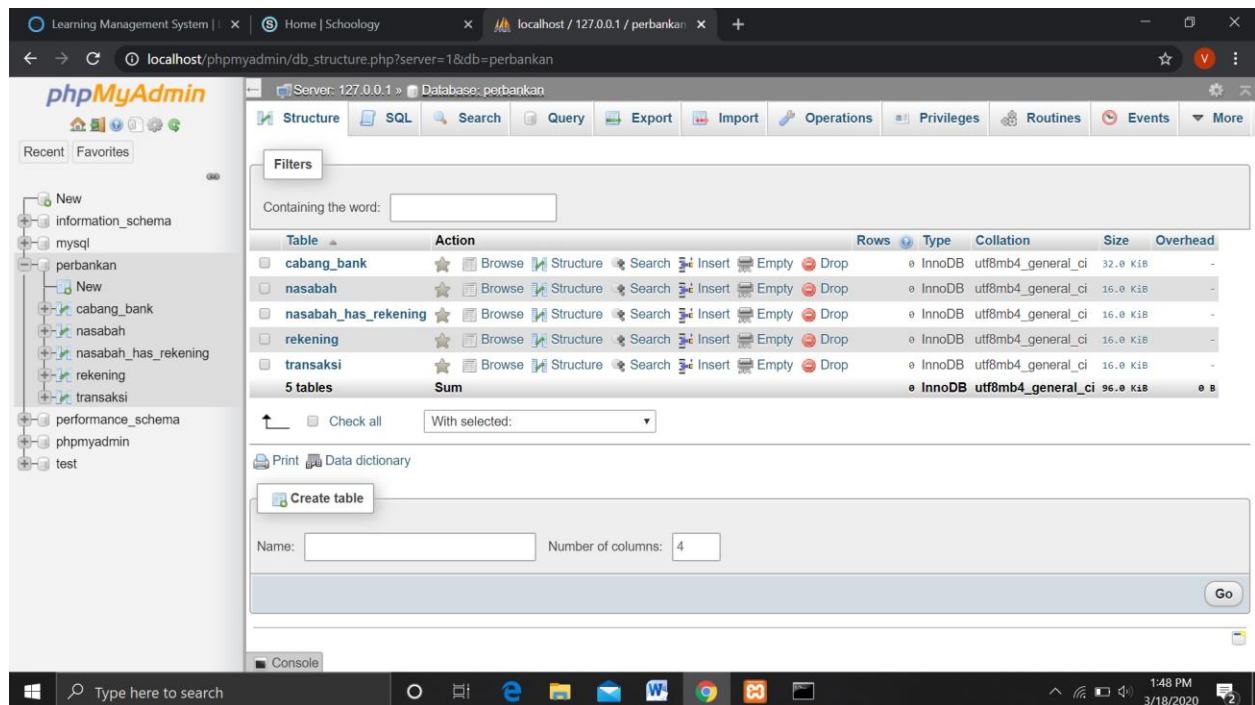
3. Tampilan tabel “Perbankan”

```
Command Prompt - mysql -u root -p
MariaDB [perbankan]> show tables;
+-----+
| Tables_in_perbankan |
+-----+
| cabang_bank         |
| nasabah             |
| nasabah_has_rekening |
| rekening            |
| transaksi           |
+-----+
5 rows in set (0.001 sec)

MariaDB [perbankan]> desc 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 (0.035 sec)

MariaDB [perbankan]> desc cabang_bank;
+-----+
| Field          | Type          | Null | Key | Default | Extra |
+-----+
| kode_cabang    | varchar(20)   | NO   | PRI | NULL    |       |
| nama_cabang    | varchar(45)   | NO   | UNI | NULL    |       |
| alamat_cabang  | varchar(255)  | NO   |     | NULL    |       |
+-----+
3 rows in set (0.033 sec)

MariaDB [perbankan]>
```



Tugas

1. Membuat database “kuliah” dan membuat tabelnya

```
Command Prompt - mysql -u root -p
Microsoft Windows [Version 10.0.18362.657]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\This>cd\

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

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 31
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)]> create database kuliah;
Query OK, 1 row affected (0.011 sec)

MariaDB [(none)]> use kuliah;
Database changed
MariaDB [kuliah]> CREATE TABLE mahasiswa(
  -> nama_mahasiswa VARCHAR(45) NOT NULL,
  -> NIM VARCHAR(20) PRIMARY KEY,
  -> alamat_mahasiswa VARCHAR(255) 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 5
MariaDB [kuliah]> CREATE TABLE mahasiswa(
  -> nama_mahasiswa VARCHAR(45) NOT NULL,
  -> nim VARCHAR(20) PRIMARY KEY,
  -> alamat_mahasiswa VARCHAR(255) NOT NULL
  -> );
Query OK, 0 rows affected (0.051 sec)

MariaDB [kuliah]> CREATE TABLE dosen(
  -> nama_dosen VARCHAR(45) NOT NULL,
  -> nip VARCHAR(20) PRIMARY KEY,
  -> alamat_dosen VARCHAR(255) NOT NULL
  -> );
Query OK, 0 rows affected (0.045 sec)
```

```
Command Prompt - mysql -u root -p
MariaDB [kuliah]> CREATE TABLE mata_kuliah(
  -> kode_matkul VARCHAR(20) PRIMARY KEY,
  -> nama_matkul VARCHAR(45) NOT NULL
  -> );
Query OK, 0 rows affected (0.051 sec)

MariaDB [kuliah]> CREATE TABLE ruang_kelas(
  -> nama_ruang VARCHAR(45) NOT NULL,
  -> kode_ruang VARCHAR(20) PRIMARY KEY
  -> );
Query OK, 0 rows affected (0.046 sec)

MariaDB [kuliah]> CREATE TABLE DOSEN_USE_RUANG_KELAS(
  -> nimFK VARCHAR(20) REFERENCES mahasiswa(nim) ON DELETE CASCADE ON UPDATE CASCADE,
  -> nipFK VARCHAR(20) REFERENCES dosen(nip) ON DELETE CASCADE ON UPDATE CASCADE,
  -> PRIMARY KEY(nimFK, nipFK)
  -> );
Query OK, 0 rows affected (0.051 sec)

MariaDB [kuliah]> CREATE TABLE DOSEN_USE_RUANG_KELAS(
  -> nipFK VARCHAR(20) REFERENCES dosen(nip) ON CASCADE ON UPDATE CASCADE,
  -> kode_ruangFK VARCHAR(20) REFERENCES ruang_kelas(kode_ruang) ON DELETE CASCADE ON UPDATE CASCADE,
  -> PRIMARY KEY(nipFK, kode_ruangFK)
  -> );
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 'CASCADE ON UPDA
TE CASCADE,
kode_ruangFK VARCHAR(20) REFERENCES ruang_kelas(kode_' at line 2
MariaDB [kuliah]> CREATE TABLE DOSEN_USE_RUANG_KELAS(
  -> nipFK VARCHAR(20) REFERENCES dosen(nip) ON DELETE CASCADE ON UPDATE CASCADE,
  -> kode_ruangFK VARCHAR(20) REFERENCES ruang_kelas(kode_ruang) ON DELETE CASCADE ON UPDATE CASCADE,
  -> PRIMARY KEY(nipFK, kode_ruangFK)
  -> );
ERROR 1050 (42501): Table 'dosen_use_ruang_kelas' already exists
MariaDB [kuliah]> CREATE TABLE DOSEN_USE_RUANG_KELAS(
  -> nipFK VARCHAR(20) REFERENCES dosen(nip) ON DELETE CASCADE ON UPDATE CASCADE,
  -> kode_ruangFK VARCHAR(20) REFERENCES ruang_kelas(kode_ruang) ON DELETE CASCADE ON UPDATE CASCADE,
  -> PRIMARY KEY(nipFK, kode_ruangFK)
  -> );
ERROR 1050 (42501): Table 'dosen_use_ruang_kelas' already exists
MariaDB [kuliah]> CREATE TABLE dosen_teach_mata_kuliah(
  -> nipFK VARCHAR(20) REFERENCES dosen(nip) ON DELETE CASCADE ON UPDATE CASCADE,
```

```

Command Prompt - mysql -u root -p
nipFK VARCHAR(20) REFERENCES dosen(nip) ON' at line 1
MariaDB [kuliah]> CREATE TABLE dosen_teach_mata_kuliah(
  -> nipFK VARCHAR(20) REFERENCES dosen(nip) ON DELETE CASCADE ON UPDATE CASCADE,
  -> kode_matkulFK VARCHAR(20) REFERENCES mata_kuliah(kode_matkul) ON DELETE CASCADE ON UPDATE CASCADE,
  -> PRIMARY KEY(nipFK, kode_matkulFK)
  -> );
Query OK, 0 rows affected (0.046 sec)

MariaDB [kuliah]> CREATE TABLE dosen_teach_mahasiswa(
  -> nipFK VARCHAR(20) REFERENCES dosen(nip) ON DELETE CASCADE ON UPFATE CASCADE,
  -> nimFK VARCHAR(20) REFERENCES mahasiswa(nim) ON DELETE CASCADE ON UPDATE CASCADE,
  -> PRIMARY KEY(nipFK, nimFK)
  -> );
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 'UPFATE CASCADE,'

nipFK VARCHAR(20) REFERENCES mahasiswa(nim) ON DELETE CASCADE ON' at line 2
MariaDB [kuliah]> CREATE TABLE dosen_teach_mahasiswa(
  -> nipFK VARCHAR(20) REFERENCES dosen(nip) ON DELETE CASCADE ON UPDATE CASCADE,
  -> nimFK VARCHAR(20) REFERENCES mahasiswa(nim) ON DELETE CASCADE ON UPDATE CASCADE,
  -> PRIMARY KEY(nipFK, nimFK)
  -> );
Query OK, 0 rows affected (0.044 sec)

MariaDB [kuliah]> CREATE TABLE mahasiswa_take_mata_kuliah(
  -> nimFK VARCHAR(20) REFERENCES mahasiswa(nim) ON DELETE CASCADE ON UPDATE CASCADE,
  -> kode_matkulFK VARCHAR(20) REFERENCES mata_kuliah(kode_matkul) ON DELETE CASCADE ON UPDATE CASCADE,
  -> PRIMARY KEY(nimFK, kode_makulFK)
  -> );
ERROR 1072 (42000): Key column 'kode_makulFK' doesn't exist in table
MariaDB [kuliah]> CREATE TABLE mahasiswa_take_mata_kuliah(
  -> nimFK VARCHAR(20) REFERENCES mahasiswa(nim) ON DELETE CASCADE ON UPDATE CASCADE,
  -> kode_matkulFK VARCHAR(20) REFERENCES mata_kuliah(kode_matkul) ON DELETE CASCADE ON UPDATE CASCADE,
  -> PRIMARY KEY(nimFK, kode_matkulFK)
  -> );
Query OK, 0 rows affected (0.048 sec)

MariaDB [kuliah]> CREATE TABLE mata_kuliah_fill_ruang_kelas(
  -> kode_matkulFK VARCHAR(20) REFERENCES mata_kuliah(kode_matkul) ON DELETE CASCADE ON UPDATE CASCADE,
  -> kode_ruangFK VARCHAR(20) REFERENCES ruang_kelas(kode_ruang) ON DELETE CASCADE ON UPDATE CASCADE,
  -> PRIMARY KEY(kode_matkulFK, kode_ruangFK)
  -> );

```

```

Command Prompt - mysql -u root -p
MariaDB [kuliah]> CREATE TABLE mata_kuliah_fill_ruang_kelas(
  -> kode_matkulFK VARCHAR(20) REFERENCES mata_kuliah(kode_matkul) ON DELETE CASCADE ON UPDATE CASCADE,
  -> kode_ruangFK VARCHAR(20) REFERENCES ruang_kelas(kode_ruang) ON DELETE CASCADE ON UPDATE CASCADE,
  -> PRIMARY KEY(kode_matkulFK, kode_ruangFK)
  -> );
Query OK, 0 rows affected (0.045 sec)

MariaDB [kuliah]>

```

2. Menampilkan tables

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

MariaDB [kuliah]> show tables;
+-----+
| Tables_in_kuliah |
+-----+
| dosen             |
| dosen_teach_mahasiswa |
| dosen_teach_mata_kuliah |
| dosen_use_ruang_kelas |
| mahasiswa         |
| mahasiswa_take_mata_kuliah |
| mata_kuliah       |
| mata_kuliah_fill_ruang_kelas |
| ruang_kelas       |
+-----+
9 rows in set (0.001 sec)

MariaDB [kuliah]> desc dosen
-> );
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 2
MariaDB [kuliah]> desc dosen;
+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+
| nama_dosen | varchar(45) | NO   |     | NULL    |       |
| nip        | varchar(20) | NO   | PRI | NULL    |       |
| alamat_dosen | varchar(255) | NO   |     | NULL    |       |
+-----+
3 rows in set (0.034 sec)

MariaDB [kuliah]> desc mahasiswa;
+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+
| nama_mahasiswa | varchar(45) | NO   |     | NULL    |       |
| nim          | varchar(20) | NO   | PRI | NULL    |       |
| alamat_mahasiswa | varchar(255) | NO   |     | NULL    |       |
+-----+
3 rows in set (0.033 sec)

MariaDB [kuliah]> desc ruang_kelas;
```

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

MariaDB [kuliah]> desc ruang_kelas;
+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+
| nama_ruang | varchar(45) | NO   |     | NULL    |       |
| kode_ruang | varchar(20) | NO   | PRI | NULL    |       |
+-----+
2 rows in set (0.038 sec)

MariaDB [kuliah]> desc mata_kuliah;
+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+
| kode_matkul | varchar(20) | NO   | PRI | NULL    |       |
| nama_matkul | varchar(45) | NO   |     | NULL    |       |
+-----+
2 rows in set (0.038 sec)

MariaDB [kuliah]> desc mahasiswa_take_mata_kuliah;
+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+
| nimFK      | varchar(20) | NO   | PRI | NULL    |       |
| kode_matkulFK | varchar(20) | NO   | PRI | NULL    |       |
+-----+
2 rows in set (0.031 sec)

MariaDB [kuliah]> desc dosen_teach_mahasiswa;
+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+
| nipFK      | varchar(20) | NO   | PRI | NULL    |       |
| nimFK      | varchar(20) | NO   | PRI | NULL    |       |
+-----+
2 rows in set (0.033 sec)

MariaDB [kuliah]> desc mata_kuliah_fill_ruang_kelas;
+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+
+-----+
0 rows in set (0.000 sec)
```

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

MariaDB [kuliah]> desc mata_kuliah_fill_ruang_kelas;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| kode_matkulFK | varchar(20) | NO | PRI | NULL | |
| kode_ruangFK | varchar(20) | NO | PRI | NULL | |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.036 sec)

MariaDB [kuliah]>
```

Learning Management System | x Home | Schoology x localhost / 127.0.0.1 / kuliah | php x +

localhost/phpmyadmin/db_structure.php?server=1&db=kuliah

phpMyAdmin

Recent Favorites

Information_schema

kuliah

- New
- dosen
- dosen_teach_mahasiswa
- dosen_teach_mata_kuliah
- dosen_use_ruang_kelas
- mahasiswa
- mahasiswa_take_mata_ku
- mata_kuliah
- mata_kuliah_fill_ruang_kel
- ruang_kelas

mysql

- perbankan
- New
- cabang_bank
- nasabah
- nasabah_has_rekening
- rekening
- transaksi

performance_schema

phpmyadmin

Server: 127.0.0.1 » Database: kuliah

Structure SQL Search Query Export Import Operations Privileges Routines More

Filters

Containing the word:

Table	Action	Rows	Type	Collation	Size	Overhead
dosen	★ Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_general_ci	16.0 K	B
dosen_teach_mahasiswa	★ Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_general_ci	16.0 K	B
dosen_teach_mata_kuliah	★ Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_general_ci	16.0 K	B
dosen_use_ruang_kelas	★ Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_general_ci	16.0 K	B
mahasiswa	★ Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_general_ci	16.0 K	B
mahasiswa_take_mata_kuliah	★ Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_general_ci	16.0 K	B
mata_kuliah	★ Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_general_ci	16.0 K	B
mata_kuliah_fill_ruang_kelas	★ Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_general_ci	16.0 K	B
ruang_kelas	★ Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_general_ci	16.0 K	B
9 tables	Sum		InnoDB	utf8mb4_general_ci	144.0 K	B

Check all With selected:

Print Data dictionary

Create table

Console