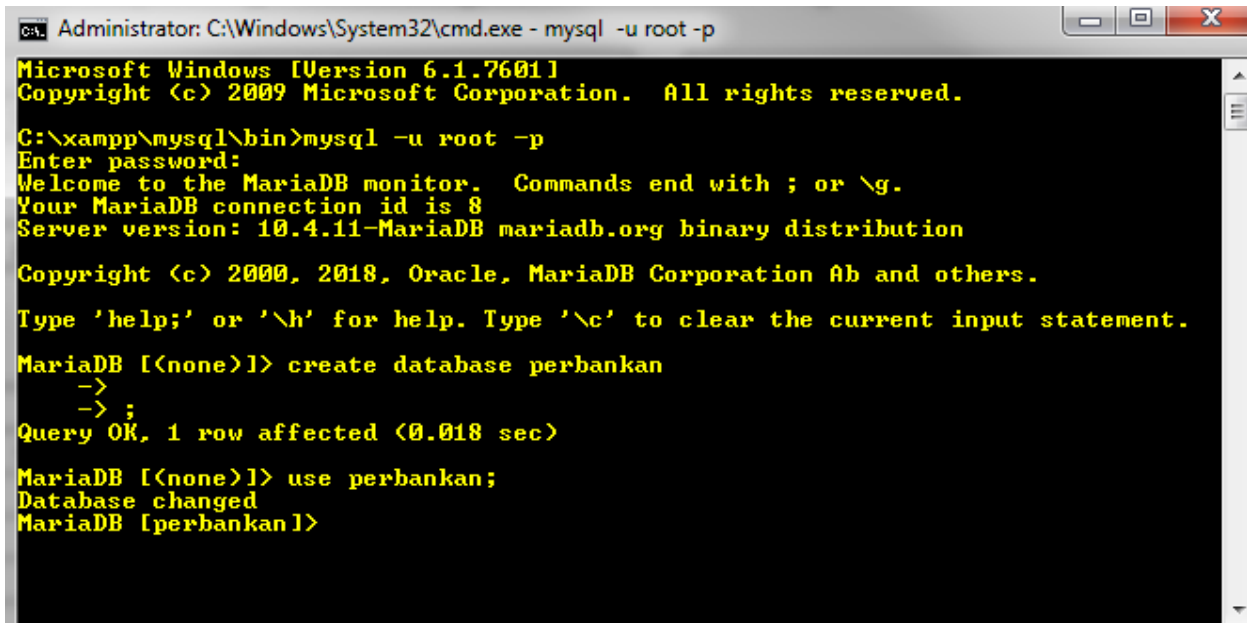


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## 1. Activity



```
Administrator: C:\Windows\System32\cmd.exe - mysql -u root -p
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

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 8
Server version: 10.4.11-MariaDB mariadb.org binary distribution

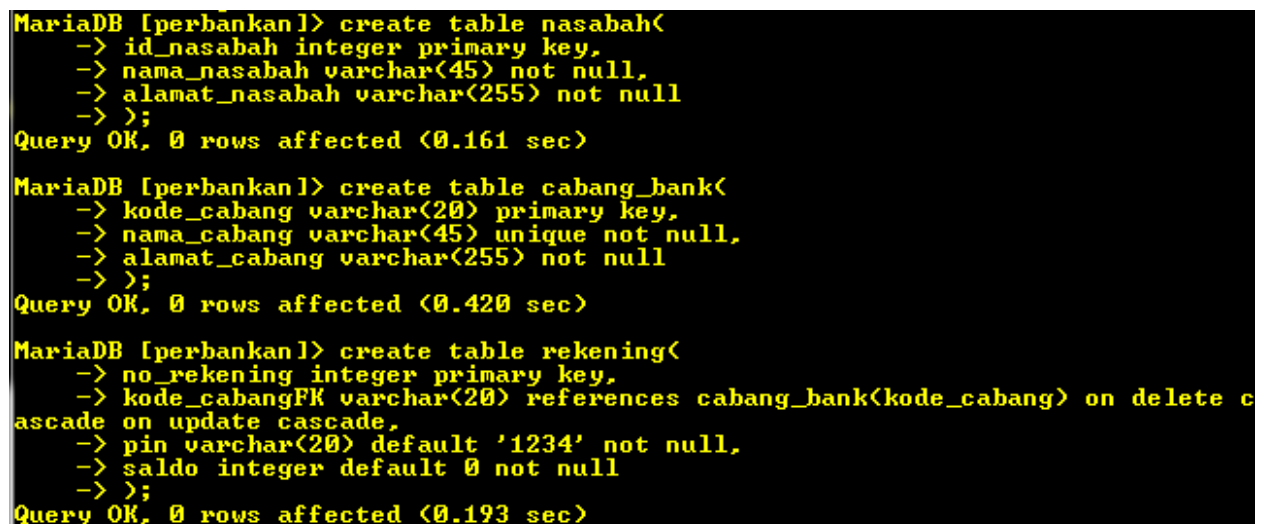
Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

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

MariaDB [(none)]> create database perbankan
->
-> ;
Query OK, 1 row affected (0.018 sec)

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

Create perbankan table



```
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 (0.161 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 (0.420 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
-> );
Query OK, 0 rows affected (0.193 sec)
```

Create Table nasabah, cabang\_bank, rekening

```

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 (0.359 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 (0.211 sec)

```

Create Table transaksi, nasabah\_has\_rekening

```

MariaDB [perbankan]> show tables;
+-----+
| Tables_in_perbankan |
+-----+
| cabang_bank          |
| nasabah              |
| nasabah_has_rekening |
| rekening             |
| transaksi            |
+-----+
5 rows in set (0.255 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 (0.127 sec)

MariaDB [perbankan]>

```

Show Table

## 2. Assignment

```
C:\Windows\System32\cmd.exe - mysql -u root -p
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

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 9
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 university;
Query OK, 1 row affected (0.001 sec)

MariaDB [(none)]> use university
Database changed
MariaDB [university]> create table dosen(
  -> nip integer primary key,
  -> nama varchar(45) not null,
  -> alamat varchar(255) not null
  -> );
Query OK, 0 rows affected (0.200 sec)

MariaDB [university]> create table mahasiswa(
  -> nim integer primary key,
  -> nama varchar(45) not null,
  -> alamat varchar(255) not null,
  -> major varchar(20) not null
  -> );
Query OK, 0 rows affected (0.210 sec)

MariaDB [university]> create table mata_kuliah(
  -> kode_mk varchar(20) primary key,
  -> nama_mk varchar(20) not null
  -> );
Query OK, 0 rows affected (0.172 sec)

MariaDB [university]> create table dosen_has_mata_kuliah(
  -> nipFK integer references dosen(nip) on delete cascade on update cascade,
  -> kode_mkFK integer references mata_kuliah(kode_mk) on delete cascade on up
date cascade,
  -> primary key(nipFK, kode_mkFK)
  -> );
Query OK, 0 rows affected (0.247 sec)

MariaDB [university]> create table dosen_has_mahasiswa(
  -> nipFK integer references dosen(nip) on delete cascade on update cascade,
  -> nimFK integer references mahasiswa(nim) on delete cascade on update casca
de,
  -> primary key(nipFK, nimFK)
  -> );
Query OK, 0 rows affected (0.212 sec)

MariaDB [university]> create table mahasiswa_has_mata_kuliah(
  -> nimFK integer references mahasiswa(nim) on delete cascade on update casca
de,
  -> kode_mkFK varchar(20) references mata_kuliah(kode_mk) on delete cascade o
n update cascade,
  -> primary key(nimFK, kode_mkFK)
  -> );
Query OK, 0 rows affected (0.265 sec)

MariaDB [university]> create table mata_kuliah_has_ruang_kelas(
  -> kode_mkFK varchar(20) references mata_kuliah(kode_mk) on delete cascade o
n update cascade,
  -> kode_ruangFK varchar(20) references ruang_kelas(kode_ruang) on delete cas
cade on update cascade,
  -> primary key(kode_mkFK, kode_ruangFK)
  -> );
MariaDB [university]> create table ruang_kelas(
  -> kode_ruang varchar(20) primary key,
  -> nama_ruang varchar(45) not null
  -> );
Query OK, 0 rows affected (0.282 sec)

MariaDB [university]>
```

Create database university, and all it's tables

```

MariaDB [university]> show tables;
+-----+
| Tables_in_university |
+-----+
| dosen                 |
| dosen_has_mahasiswa   |
| dosen_has_mata_kuliah |
| mahasiswa             |
| mahasiswa_has_mata_kuliah |
| mata_kuliah           |
| mata_kuliah_has_ruang_kelas |
+-----+
7 rows in set (0.001 sec)

MariaDB [university]> describe dosen;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| nip   | int(11)       | NO   | PRI | NULL    |       |
| nama  | varchar(45)   | NO   |     | NULL    |       |
| alamat | varchar(255)  | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.003 sec)

MariaDB [university]> describe dosen_has_mahasiswa;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| nipFK | int(11)       | NO   | PRI | NULL    |       |
| ninFK | int(11)       | NO   | PRI | NULL    |       |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.003 sec)

MariaDB [university]> describe mahasiswa;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| nin   | int(11)       | NO   | PRI | NULL    |       |
| nama  | varchar(45)   | NO   |     | NULL    |       |
| alamat | varchar(255)  | NO   |     | NULL    |       |
| major | varchar(20)   | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.003 sec)

MariaDB [university]> describe dosen_has_mahasiswa;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| nipFK | int(11)       | NO   | PRI | NULL    |       |
| ninFK | int(11)       | NO   | PRI | NULL    |       |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.002 sec)

MariaDB [university]> describe mahasiswa_has_mata_kuliah;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| ninFK | int(11)       | NO   | PRI | NULL    |       |
| kode_mkFK | varchar(20) | NO   | PRI | NULL    |       |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.003 sec)

MariaDB [university]> describe mata_kuliah;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| kode_mk | varchar(20)   | NO   | PRI | NULL    |       |
| nama_mk | varchar(20)   | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.003 sec)

MariaDB [university]> describe mata_kuliah_has_ruang_kelas;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| kode_mkFK | varchar(20) | NO   | PRI | NULL    |       |
| kode_ruangFK | varchar(20) | NO   | PRI | NULL    |       |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.003 sec)

MariaDB [university]> describe ruang_kelas;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| kode_ruang | varchar(20)   | NO   | PRI | NULL    |       |
| nama_ruang | varchar(45)   | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.003 sec)

```

Show all the tables