Nama   **: DANANG AJI N**

NIM   **: L200180015**

KELAS   **: A**

MODUL4

```
Command Prompt - mysql  -u root -p                                    —    □    ×

MariaDB [(none)]> create database perbankan;
ERROR 1007 (HY000): Can't create database 'perbankan'; database exists
MariaDB [(none)]> create database Perbankan;
ERROR 1007 (HY000): Can't create database 'perbankan'; database exists
MariaDB [(none)]> create database perbankann;
Query OK, 1 row affected (0.001 sec)

MariaDB [(none)]> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| mysql              |
| perbankan          |
| perbankann         |
| performance_schema |
| phpmyadmin         |
| test               |
+--------------------+
7 rows in set (0.001 sec)

MariaDB [(none)]> use perbankann;
Database changed
MariaDB [perbankann]> 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 (0.355 sec)
```

```
Command Prompt - mysql  -u root -p                                    —    □    ×

MariaDB [perbankann]> 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 (0.470 sec)

MariaDB [perbankann]> 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 (0.334 sec)

MariaDB [perbankann]> 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 [perbankann]> 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 (0.598 sec)
```

```
Command Prompt - mysql -u root -p                                              —  □  ×

MariaDB [perbankann]> show tables;
+---------------------+
| Tables_in_perbankann |
+---------------------+
| cabang_bank         |
| nasabah             |
| nasabah_has_rekening |
| rekening            |
| transaksi           |
+---------------------+
5 rows in set (0.001 sec)

MariaDB [perbankann]> 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 (0.113 sec)

MariaDB [perbankann]> 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 (0.076 sec)

MariaDB [perbankann]> desc nasabah_has_rekening;
+---------------+---------+------+-----+---------+-------+
| Field         | Type    | Null | Key | Default | Extra |
+---------------+---------+------+-----+---------+-------+
| id_nasabahFK  | int(11) | NO   | PRI | NULL    |       |
| no_rekeningFK | int(11) | NO   | PRI | NULL    |       |
+---------------+---------+------+-----+---------+-------+
```

```
2 rows in set (0.006 sec)

MariaDB [perbankann]> desc rekening;
+---------------+-------------+------+-----+---------+-------+
| Field         | Type        | Null | Key | Default | Extra |
+---------------+-------------+------+-----+---------+-------+
| no_rekening   | int(11)     | NO   | PRI | NULL    |       |
| kode_cabangFK | varchar(20) | YES  |     | NULL    |       |
| pin           | varchar(20) | NO   |     | 1234    |       |
| saldo         | int(11)     | NO   |     | 0       |       |
+---------------+-------------+------+-----+---------+-------+
4 rows in set (0.006 sec)

MariaDB [perbankann]> desc transaksi;
+----------------+-------------------+------+-----+-------------------+----------------+
| Field          | Type              | Null | Key | Default           | Extra          |
+----------------+-------------------+------+-----+-------------------+----------------+
| no_transaksi   | bigint(20) unsigned | NO | PRI | NULL              | auto_increment |
| id_nasabahFK   | int(11)           | YES  |     | NULL              |                |
| no_rekeningFK  | int(11)           | YES  |     | NULL              |                |
| jenis_transaksi | varchar(20)      | NO   |     | debit             |                |
| tanggal        | datetime          | NO   |     | current_timestamp() |              |
| jumlah         | int(11)           | NO   |     | NULL              |                |
+----------------+-------------------+------+-----+-------------------+----------------+
6 rows in set (0.053 sec)

MariaDB [perbankann]>
```

Tugas


```
Command Prompt - mysql -u root
Microsoft Windows [Version 10.0.15063]
(c) 2017 Microsoft Corporation. All rights reserved.

C:\Users\dell>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 2
Server version: 10.1.38-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           |
+--------------------+
| information_schema |
| mysql              |
| performance_schema |
| phpmyadmin         |
| test               |
+--------------------+
5 rows in set (0.10 sec)

MariaDB [(none)]> create database e-raport;
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 '-raport' at
line 1
MariaDB [(none)]> create database raport;
Query OK, 1 row affected (0.04 sec)
```



```
Command Prompt - mysql -u root
MariaDB [(none)]> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| mysql              |
| performance_schema |
| phpmyadmin         |
| raport             |
| test               |
+--------------------+
6 rows in set (0.00 sec)

MariaDB [(none)]> use raport;
Database changed
MariaDB [raport]> create table siswa;
ERROR 1113 (42000): A table must have at least 1 column
MariaDB [raport]> create table siswa(
    -> no_induk_siswa integer(20) primary key,
    -> nama_siswa varchar(45),
    -> alamat_siswa(255));
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 '(255))' at
line 4
MariaDB [raport]> create table siswa(
    -> no_induk_siswa integer(20) primary key,
    -> nama_siswa varchar(45),
    -> alamat_siswa varchar(255));
Query OK, 0 rows affected (0.29 sec)

MariaDB [raport]> show tables;
+------------------+
| Tables_in_raport |
+------------------+
| siswa            |
+------------------+
1 row in set (0.00 sec)

MariaDB [raport]> create table guru(
    -> nip_guru integer(20) primary key,
    -> nama_guru varchar(45),
    -> alamat_guru varchar(255));
Query OK, 0 rows affected (0.25 sec)
```

```
MariaDB [raport]> create table mata_pelajaran(
    -> kode_mapel varchar(20) primary key,
    -> nilai integer(20),
    -> kkm integer(20));
Query OK, 0 rows affected (0.28 sec)

MariaDB [raport]> create table orang_tua(
    -> nik_ortu integer(20) primary key,
    -> no_induk_siswafk integer(20) preferences siswa(no_induk_siswa) on delele cascude on update cascude,
    -> nama_ortu varchar(45),
    -> jenis_kelamin varchar(45));
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 'siswa(no_in
duk_siswa) on delele cascude on update cascude,
nama_ortu varchar(45)' at line 3
MariaDB [raport]> create table orang_tua(
    -> nik_ortu integer(20) primary key,
    -> no_induk_siswafk integer(20) preferences siswa(no_induk_siswa) on delele cascade on update cascade,
    -> nama_ortu varchar(45),
    -> jenis_kelamin varchar(45));
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 'siswa(no_in
duk_siswa) on delele cascade on update cascade,
nama_ortu varchar(45)' at line 3
MariaDB [raport]> desc siswa;
+---------------+--------------+------+-----+---------+-------+
| Field         | Type         | Null | Key | Default | Extra |
+---------------+--------------+------+-----+---------+-------+
| no_induk_siswa| int(20)      | NO   | PRI | NULL    |       |
| nama_siswa    | varchar(45)  | YES  |     | NULL    |       |
| alamat_siswa  | varchar(255) | YES  |     | NULL    |       |
+---------------+--------------+------+-----+---------+-------+
3 rows in set (0.12 sec)

MariaDB [raport]> show tables;
+-----------------+
| Tables_in_raport|
+-----------------+
| guru            |
| mata_pelajaran  |
| siswa           |
+-----------------+
3 rows in set (0.00 sec)
```

```
MariaDB [raport]> create table orang_tua(
    -> nik_ortu integer(20) primary key,
    -> no_induk_siswafk integer(20) references siswa(no_induk_siswa) on delele cascade on update cascade,
    -> nama_ortu varchar(45),
    -> jenis_kelamin varchar(45));
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 'delele casc
ade on update cascade,
nama_ortu varchar(45),
jenis_kelamin varchar(4' at line 3
MariaDB [raport]> create table orang_tua(
    -> nik_ortu integer(20) primary key,
    -> no_induk_siswafk integer(20) references siswa(no_induk_siswa) on delete cascade on update cascade,
    -> nama_ortu varchar(45),
    -> jenis_kelamin varchar(45));
Query OK, 0 rows affected (0.25 sec)

MariaDB [raport]> show tables;
+-----------------+
| Tables_in_raport|
+-----------------+
| guru            |
| mata_pelajaran  |
| orang_tua       |
| siswa           |
+-----------------+
4 rows in set (0.00 sec)

MariaDB [raport]> desc orang_tua;
+------------------+-------------+------+-----+---------+-------+
| Field            | Type        | Null | Key | Default | Extra |
+------------------+-------------+------+-----+---------+-------+
| nik_ortu         | int(20)     | NO   | PRI | NULL    |       |
| no_induk_siswafk | int(20)     | YES  |     | NULL    |       |
| nama_ortu        | varchar(45) | YES  |     | NULL    |       |
| jenis_kelamin    | varchar(45) | YES  |     | NULL    |       |
+------------------+-------------+------+-----+---------+-------+
4 rows in set (0.08 sec)

MariaDB [raport]> create table guru_has_siswa(
    -> nip_gurufk integer(20) references guru(nip_guru) on delete cascade on update cascade,date cascade,
    -> no_induk_siswafk integer(20) references siswa(no_induk_siswa) on delete cascade on update cascade);
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,
no_induk_siswafk integer(20) references siswa(no_induk_siswa) on delete' at line 2
```

```
MariaDB [raport]> create table guru_has_siswa(
    -> nip_gurufk integer(20) references guru(nip_guru) on delete cascade on update cascade,date cascade,
    -> no_induk_siswafk integer(20) references siswa(no_induk_siswa) on delete cascade on update cascade);
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,
no_induk_siswafk integer(20) references siswa(no_induk_siswa) on delete' at line 2
MariaDB [raport]> create table guru_has_siswa(
    -> nip_gurufk integer(20) references guru(nip_guru) on delete cascade on update cascade,
    -> no_induk_siswafk integer(20) references siswa(no_induk_siswa) on delete cascade on update cascade);
Query OK, 0 rows affected (0.26 sec)

MariaDB [raport]> desc guru_has_siswa;
+------------------+----------+------+-----+---------+-------+
| Field            | Type     | Null | Key | Default | Extra |
+------------------+----------+------+-----+---------+-------+
| nip_gurufk       | int(20)  | YES  |     | NULL    |       |
| no_induk_siswafk | int(20)  | YES  |     | NULL    |       |
+------------------+----------+------+-----+---------+-------+
2 rows in set (0.02 sec)

MariaDB [raport]> create table guru_has_mata_pelajaran(
    -> nip_gurufk integer(20) references guru(nip_guru) on delete cascade on update cascade,
    -> kode_mapelfk varchar(20) references mata_pelajaran(kode_mapel) on delete cascade on update cascade);
Query OK, 0 rows affected (0.30 sec)

MariaDB [raport]> desc guru_has_mata_pelajaran;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| nip_gurufk  | int(20)     | YES  |     | NULL    |       |
| kode_mapelfk| varchar(20) | YES  |     | NULL    |       |
+-------------+-------------+------+-----+---------+-------+
2 rows in set (0.10 sec)

MariaDB [raport]> create table mata_pelajaran_has_siswa(
    -> kode_mapelfk varchar(20) references mata_pelajaran(kode_mapel) on delete cascade on update cascade,
    -> no_induk_siswafk integer(20) references siswa(no_induk_siswa) on delete cascade on update cascade);
Query OK, 0 rows affected (0.26 sec)

MariaDB [raport]> desc  mata_pelajaran_has_siswa;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| kode_mapelfk| varchar(20) | YES  |     | NULL    |       |
```

```
MariaDB [raport]> desc  mata_pelajaran_has_siswa;
+------------------+-------------+------+-----+---------+-------+
| Field            | Type        | Null | Key | Default | Extra |
+------------------+-------------+------+-----+---------+-------+
| kode_mapelfk     | varchar(20) | YES  |     | NULL    |       |
| no_induk_siswafk | int(20)     | YES  |     | NULL    |       |
+------------------+-------------+------+-----+---------+-------+
2 rows in set (0.02 sec)

MariaDB [raport]> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| mysql              |
| performance_schema |
| phpmyadmin         |
| raport             |
| test               |
+--------------------+
6 rows in set (0.00 sec)

MariaDB [raport]> show tables;
+-------------------------+
| Tables_in_raport        |
+-------------------------+
| guru                    |
| guru_has_mata_pelajaran |
| guru_has_siswa          |
| mata_pelajaran          |
| mata_pelajaran_has_siswa|
| orang_tua               |
| siswa                   |
+-------------------------+
7 rows in set (0.00 sec)

MariaDB [raport]> desc guru;
+-------------+--------------+------+-----+---------+-------+
| Field       | Type         | Null | Key | Default | Extra |
+-------------+--------------+------+-----+---------+-------+
| nip_guru    | int(20)      | NO   | PRI | NULL    |       |
| nama_guru   | varchar(45)  | YES  |     | NULL    |       |
| alamat_guru | varchar(255) | YES  |     | NULL    |       |
```

Hasil

```
2 rows in set (0.02 sec)

MariaDB [raport]> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| mysql              |
| performance_schema |
| phpmyadmin         |
| raport             |
| test               |
+--------------------+
6 rows in set (0.00 sec)

MariaDB [raport]> show tables;
+--------------------------+
| Tables_in_raport         |
+--------------------------+
| guru                     |
| guru_has_mata_pelajaran  |
| guru_has_siswa           |
| mata_pelajaran           |
| mata_pelajaran_has_siswa |
| orang_tua                |
| siswa                    |
+--------------------------+
7 rows in set (0.00 sec)

MariaDB [raport]> desc guru;
+-------------+--------------+------+-----+---------+-------+
| Field       | Type         | Null | Key | Default | Extra |
+-------------+--------------+------+-----+---------+-------+
| nip_guru    | int(20)      | NO   | PRI | NULL    |       |
| nama_guru   | varchar(45)  | YES  |     | NULL    |       |
| alamat_guru | varchar(255) | YES  |     | NULL    |       |
+-------------+--------------+------+-----+---------+-------+
3 rows in set (0.02 sec)

MariaDB [raport]> desc guru_has_mata_pelajaran;
+-------------+---------+------+-----+---------+-------+
| Field       | Type    | Null | Key | Default | Extra |
+-------------+---------+------+-----+---------+-------+
```

```
MariaDB [raport]> desc guru_has_mata_pelajaran;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| nip_gurufk  | int(20)     | YES  |     | NULL    |       |
| kode_mapelfk| varchar(20) | YES  |     | NULL    |       |
+-------------+-------------+------+-----+---------+-------+
2 rows in set (0.00 sec)

MariaDB [raport]> desc guru_has_siswa;
+------------------+---------+------+-----+---------+-------+
| Field            | Type    | Null | Key | Default | Extra |
+------------------+---------+------+-----+---------+-------+
| nip_gurufk       | int(20) | YES  |     | NULL    |       |
| no_induk_siswafk | int(20) | YES  |     | NULL    |       |
+------------------+---------+------+-----+---------+-------+
2 rows in set (0.11 sec)

MariaDB [raport]> desc mata_pelajaran;
+------------+-------------+------+-----+---------+-------+
| Field      | Type        | Null | Key | Default | Extra |
+------------+-------------+------+-----+---------+-------+
| kode_mapel | varchar(20) | NO   | PRI | NULL    |       |
| nilai      | int(20)     | YES  |     | NULL    |       |
| kkm        | int(20)     | YES  |     | NULL    |       |
+------------+-------------+------+-----+---------+-------+
3 rows in set (0.02 sec)

MariaDB [raport]> desc mata_pelajaran_has_siswa;
+------------------+-------------+------+-----+---------+-------+
| Field            | Type        | Null | Key | Default | Extra |
+------------------+-------------+------+-----+---------+-------+
| kode_mapelfk     | varchar(20) | YES  |     | NULL    |       |
| no_induk_siswafk | int(20)     | YES  |     | NULL    |       |
+------------------+-------------+------+-----+---------+-------+
2 rows in set (0.02 sec)

MariaDB [raport]> desc orang_tua;
+------------------+---------+------+-----+---------+-------+
| Field            | Type    | Null | Key | Default | Extra |
+------------------+---------+------+-----+---------+-------+
| nik_ortu         | int(20) | NO   | PRI | NULL    |       |
| no_induk_siswafk | int(20) | YES  |     | NULL    |       |
```

```
MariaDB [raport]> desc mata_pelajaran;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| kode_mapel  | varchar(20) | NO   | PRI | NULL    |       |
| nilai       | int(20)     | YES  |     | NULL    |       |
| kkm         | int(20)     | YES  |     | NULL    |       |
+-------------+-------------+------+-----+---------+-------+
3 rows in set (0.02 sec)

MariaDB [raport]> desc mata_pelajaran_has_siswa;
+------------------+-------------+------+-----+---------+-------+
| Field            | Type        | Null | Key | Default | Extra |
+------------------+-------------+------+-----+---------+-------+
| kode_mapelfk     | varchar(20) | YES  |     | NULL    |       |
| no_induk_siswafk | int(20)     | YES  |     | NULL    |       |
+------------------+-------------+------+-----+---------+-------+
2 rows in set (0.02 sec)

MariaDB [raport]> desc orang_tua;
+------------------+-------------+------+-----+---------+-------+
| Field            | Type        | Null | Key | Default | Extra |
+------------------+-------------+------+-----+---------+-------+
| nik_ortu         | int(20)     | NO   | PRI | NULL    |       |
| no_induk_siswafk | int(20)     | YES  |     | NULL    |       |
| nama_ortu        | varchar(45) | YES  |     | NULL    |       |
| jenis_kelamin    | varchar(45) | YES  |     | NULL    |       |
+------------------+-------------+------+-----+---------+-------+
4 rows in set (0.02 sec)

MariaDB [raport]> desc siswa;
+---------------+--------------+------+-----+---------+-------+
| Field         | Type         | Null | Key | Default | Extra |
+---------------+--------------+------+-----+---------+-------+
| no_induk_siswa| int(20)      | NO   | PRI | NULL    |       |
| nama_siswa    | varchar(45)  | YES  |     | NULL    |       |
| alamat_siswa  | varchar(255) | YES  |     | NULL    |       |
+---------------+--------------+------+-----+---------+-------+
3 rows in set (0.02 sec)

MariaDB [raport]>
```