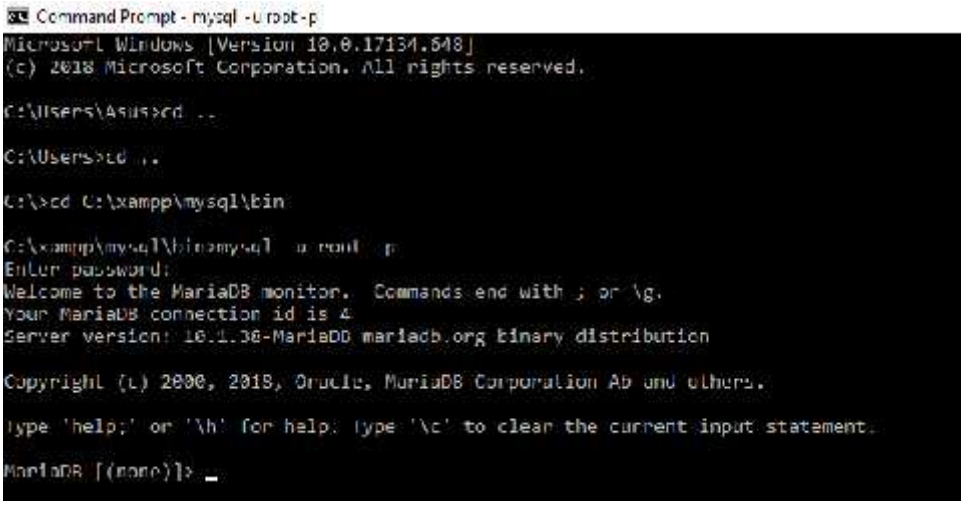
Nama : Intan Larasati

NIM : L200170091

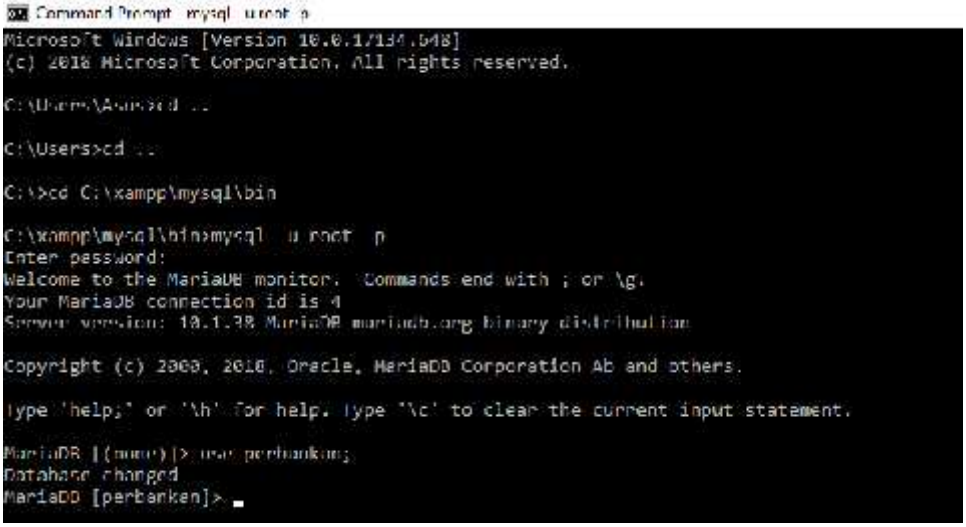
Kelas : D

1. Jalankan XAMPP Control Panel.
2. Jalankan server Apache dan MySQL.

3. Buka Command Prompt dan login sebagai root ke MySQL seperti langkah pada Modul 1.



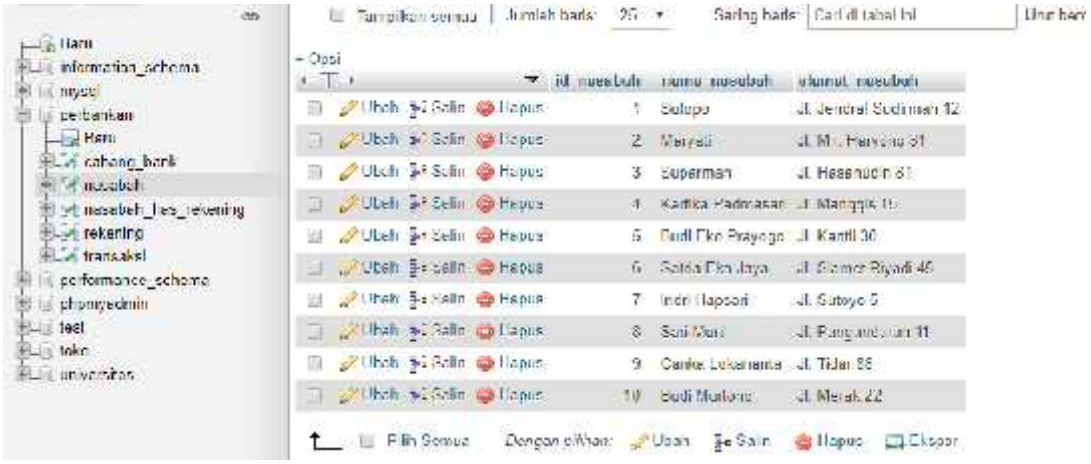
4. Pilih database perbankan dengan perintah “use perbankan”. Sehingga akan muncul pemberitahuan “database changed”.



5. Kemudian masukkan data-data ke dalam database perbankan.

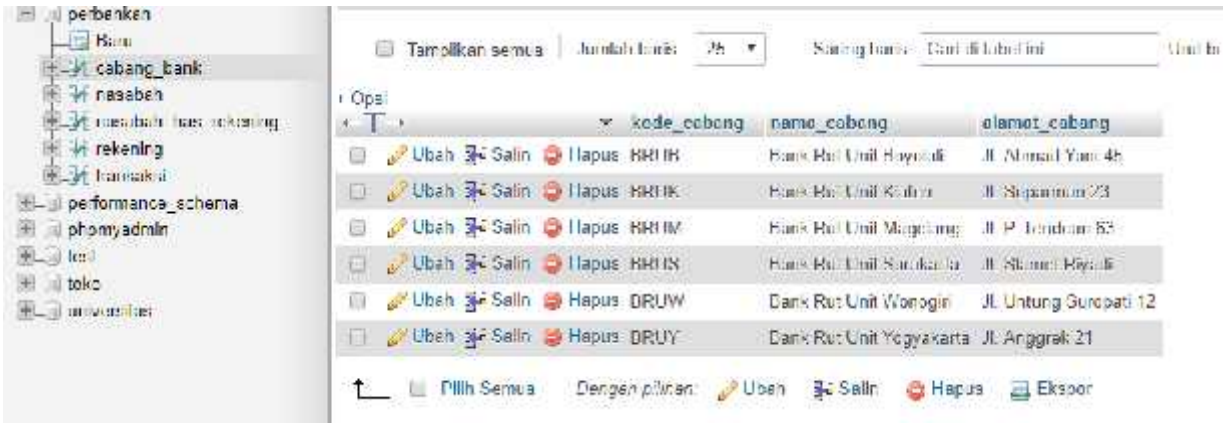
Tabel : nasabah

```
MariaDB [perbankan]> INSERT INTO nasabah(id_nasabah, nama_nasabah, alamat_nasabah) VALUES (1, 'Sutopo', 'Jl. Jendral Su
    -> (2, 'Maryati', 'Jl. MT. Haryono 31'),
    -> (3, 'Superman', 'Jl. Hasanudin 81'),
    -> (4, 'Kartika Padmasari', 'Jl. Nanggik 15'),
    -> (5, 'Budi Eka Prayoga', 'Jl. Kantil 30'),
    -> (6, 'Satria Eka Jaya', 'Jl. Slamet Riyadi 45'),
    -> (7, 'Indri Hapsari', 'Jl. Sutoyo 5'),
    -> (8, 'Sari Murti', 'Jl. Pangandaran 11'),
    -> (9, 'Canka Lokamanta', 'Jl. Tidar 86'),
    -> (10, 'Budi Murtono', 'Jl. Merak 22');
ERROR 1062 (23000): Duplicate entry '1' for key 'PRIMARY'
MariaDB [perbankan]> INSERT INTO nasabah(id_nasabah, nama_nasabah, alamat_nasabah) VALUES (3, 'Superman', 'Jl. Hasanudi
    -> (4, 'Kartika Padmasari', 'Jl. Nanggik 15'),
    -> (5, 'Budi Eka Prayoga', 'Jl. Kantil 30'),
    -> (6, 'Satria Eka Jaya', 'Jl. Slamet Riyadi 45'),
    -> (7, 'Indri Hapsari', 'Jl. Sutoyo 5'),
    -> (8, 'Sari Murti', 'Jl. Pangandaran 11'),
    -> (9, 'Canka Lokamanta', 'Jl. Tidar 86'),
    -> (10, 'Budi Murtono', 'Jl. Merak 22');
Query OK, 0 rows affected (0.00 sec)
Records: 0  Duplicates: 0  Warnings: 0
```



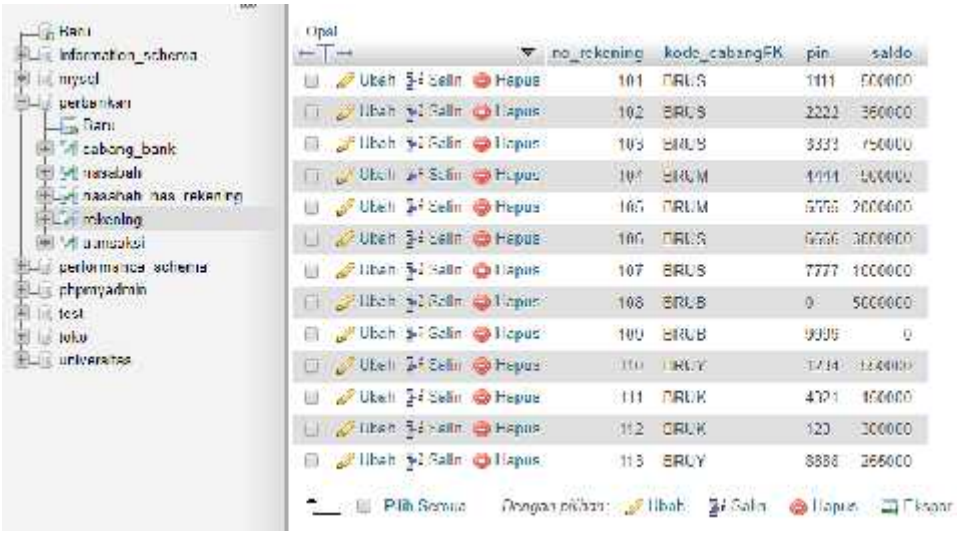
Tabel : cabang_bank

```
MariaDB [perbankan]> INSERT INTO cabang_bank(kode_cabang, nama_cabang, alamat_cabang) VALUES ('BRUX', 'Bank Rut Unit Surakarta', 'Jl. Slamet Riyadi')
    -> ('BRUB', 'Bank Rut Unit Magelang', 'Jl. P. Tendean 65'),
    -> ('BRUB', 'Bank Rut Unit Boyolali', 'Jl. Ahmad Yani 45'),
    -> ('BRUC', 'Bank Rut Unit Klaten', 'Jl. Superman 21'),
    -> ('BRUY', 'Bank Rut Unit Yogyakarta', 'Jl. Anggrek 21'),
    -> ('BRUW', 'Bank Rut Unit Wonogiri', 'Jl. Untung Surapati 12');
Query OK, 0 rows affected (0.00 sec)
Records: 0  Duplicates: 0  Warnings: 0

MariaDB [perbankan]>
```



Tabel : rekening

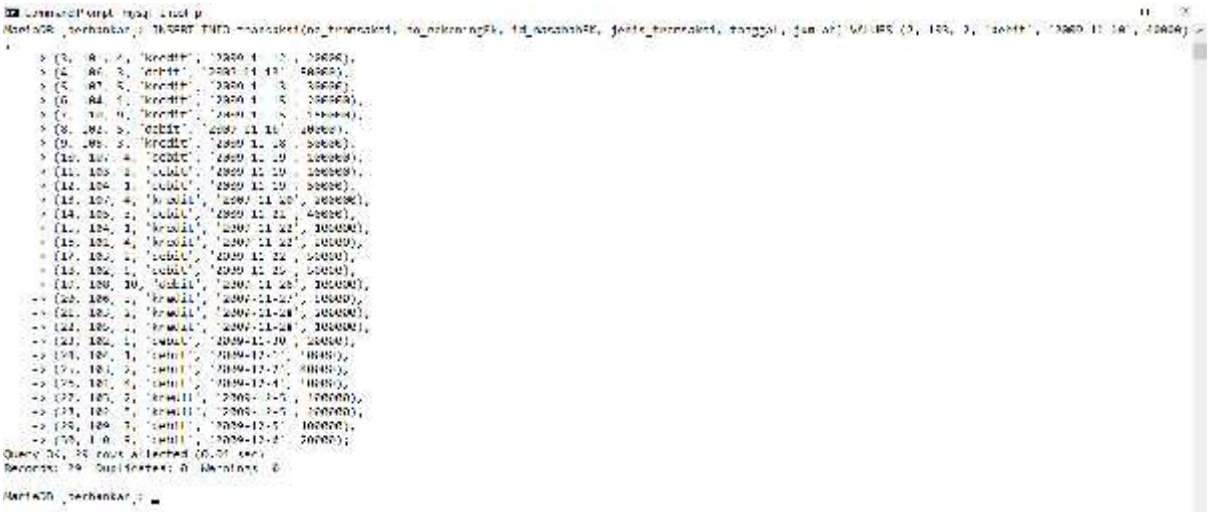
```
MariaDB [perbankan]> INSERT INTO rekening(no_rekening, kode_cabangFK, pin, saldo) VALUES (101, 'BRUS', 1111, 500000),
    -> (102, 'BRUS', 2222, 350000),
    -> (103, 'BRUS', 3333, 750000),
    -> (104, 'BRUM', 4444, 900000),
    -> (105, 'BRUM', 5555, 2000000),
    -> (106, 'BRUS', 6666, 4000000),
    -> (107, 'BRUS', 7777, 1000000),
    -> (108, 'BRUB', 8888, 5000000),
    -> (109, 'BRUB', 9999, 0),
    -> (110, 'BRUY', 1234, 550000),
    -> (111, 'BRUK', 4321, 150000),
    -> (112, 'BRUK', 0124, 400000),
    -> (113, 'BRUY', 8888, 255000);
Query OK, 13 rows affected (0.05 sec)
Records: 13  Duplicates: 0  Warnings: 0

MariaDB [perbankan]> describe rekening;
```



Tabel : nasabah_has_rekening

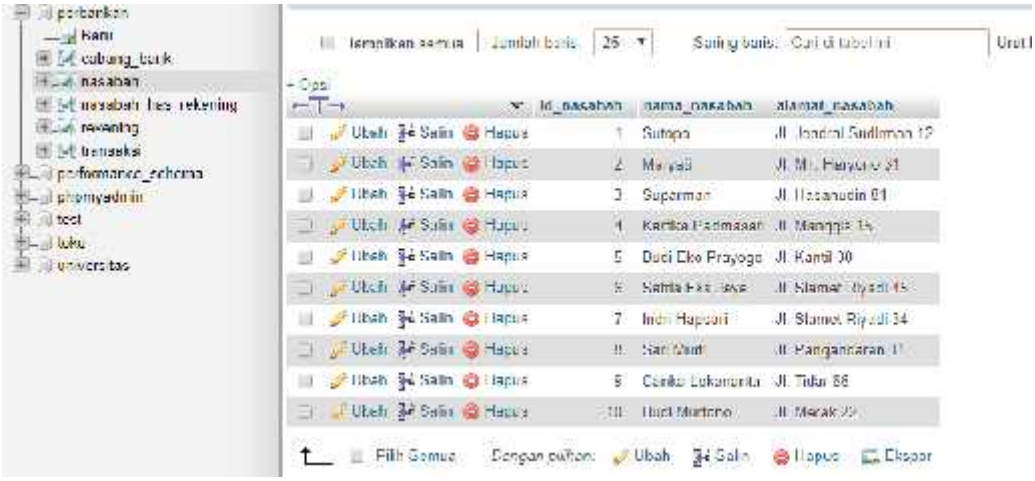
```
MariaDB [perbankan]> INSERT INTO nasabah_has_rekening(id_nasabahFK, no_rekeningFK) VALUES (1, 104),
    -> (2, 103),
    -> (3, 105),
    -> (3, 106),
    -> (4, 101),
    -> (4, 107),
    -> (5, 102),
    -> (5, 107),
    -> (6, 102),
    -> (7, 108),
    -> (8, 111),
    -> (9, 110),
    -> (10, 113),
    -> (8, 112),
    -> (10, 108);
Query OK, 15 rows affected (0.01 sec)
Records: 15  Duplicates: 0  Warnings: 0

MariaDB [perbankan]>
```

Tabel : transaksi



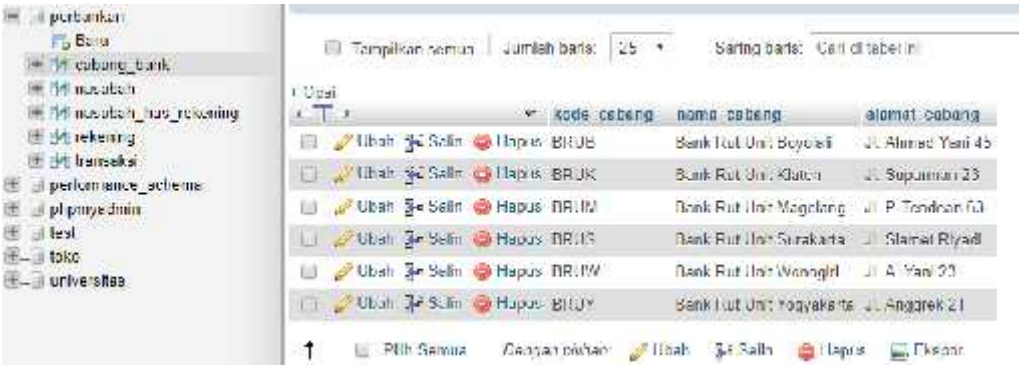
6. Lakukan update untuk kasus-kasus berikut ini :
   a. Nasabah dengan nama “Indri Hapsari” pindah alamat ke “Jalan Slamet Riyadi No.34”.

```
MariaDB [perbankan]> UPDATE nasabah
    -> SET alamat_nasabah = 'Jl. Slamet Riyadi 34'
    -> WHERE nama_nasabah = 'Indri Hapsari';
Query OK, 1 row affected (0.08 sec)
Rows matched: 1  Changed: 1  Warnings: 0

MariaDB [perbankan]>
```



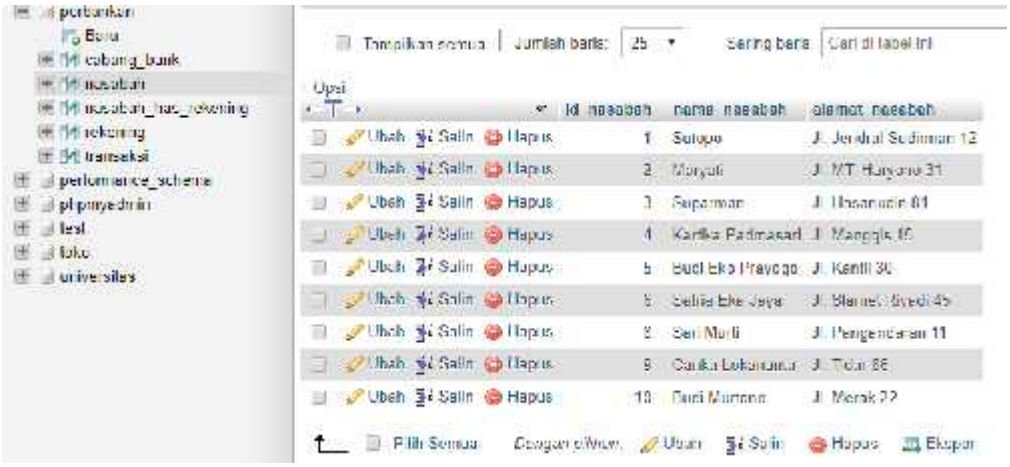
   b. Cabang dengan kode “BRUW” pindah ke alamat “Jalan A. Yani NO.23”.

```
MariaDB [perbankan]> UPDATE cabang_bank
    -> SET alamat_cabang = 'Jl. A. Yani 23'
    -> WHERE kode_cabang = 'BRUW';
Query OK, 1 row affected (0.06 sec)
Rows matched: 1  Changed: 1  Warnings: 0

MariaDB [perbankan]>
```



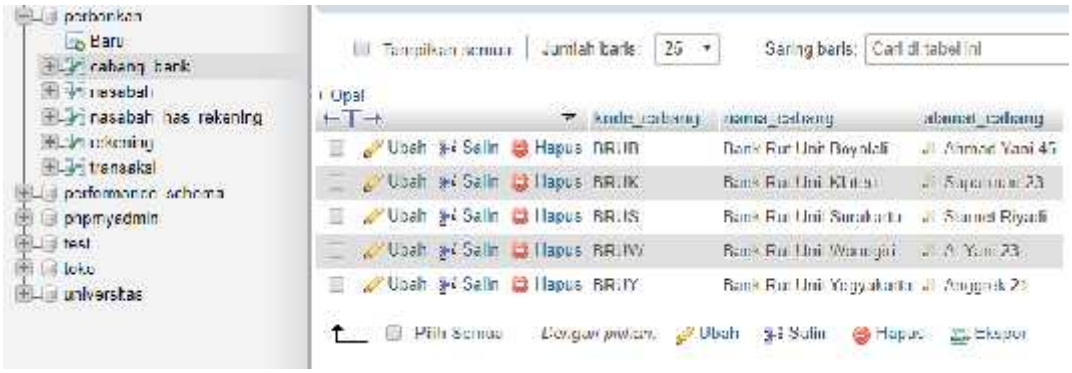
7. Lakukan penghapusan untuk kasus-kasus berikut :
   a. Nasabah dengan id “7” menutup rekeningnya.

```
MariaDB [perbankan]> DELETE FROM nasabah
    -> WHERE id_nasabah = 7;
Query OK, 1 row affected (0.10 sec)

MariaDB [perbankan]>
```



   b. Cabang dengan nama_cabang “Bank Rut Unit Magelang” menutup kantornya.

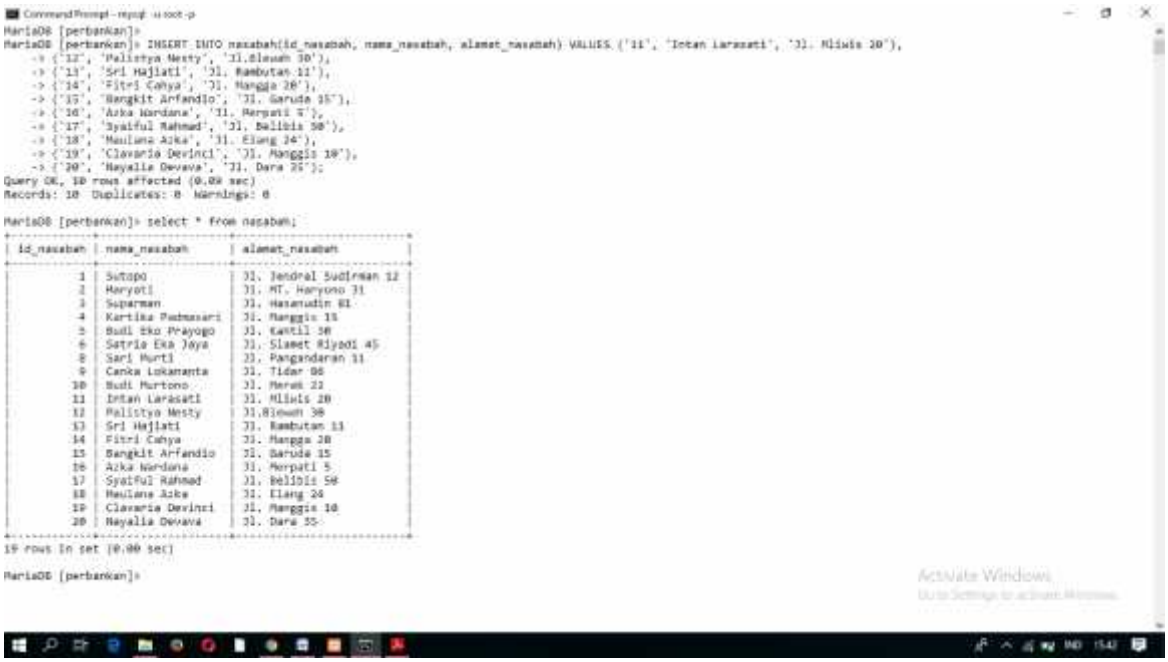
```
MariaDB [perbankan]> DELETE FROM cabang_bank
    -> WHERE nama_cabang = 'Bank Rut Unit Magelang';
Query OK, 1 row affected (0.10 sec)

MariaDB [perbankan]>
```



TUGAS

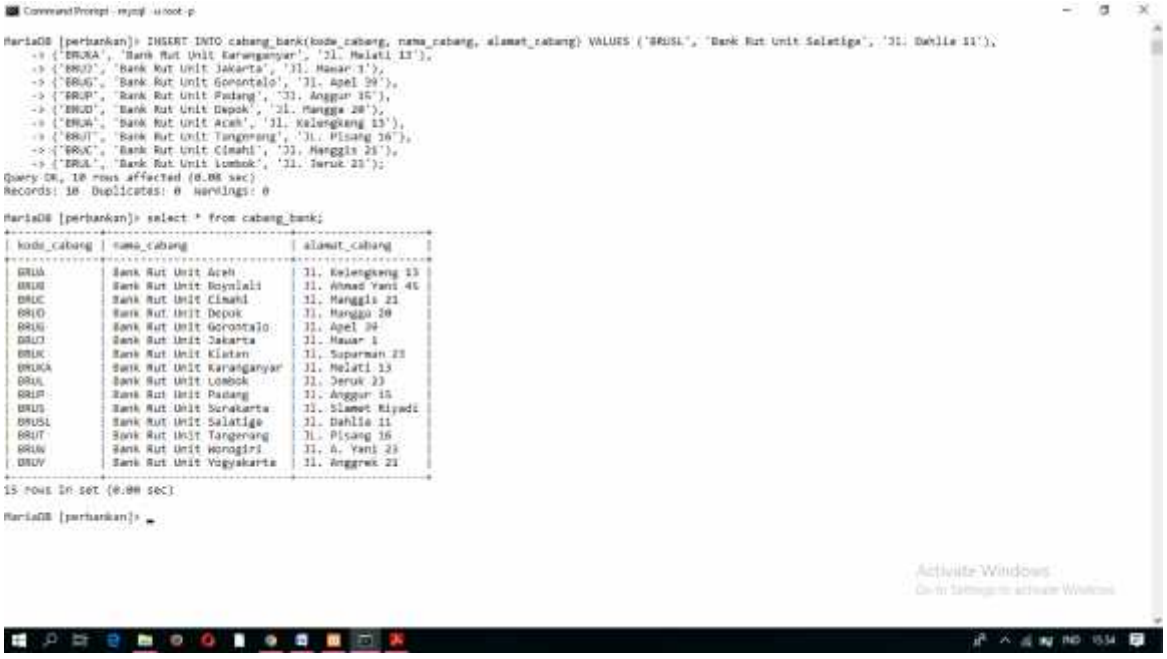
Masukkan beberapa record ke setiap tabel dalam database yang telah di buat pada modul 4 (masing-masing 10record untuk tabel master, dan 20 record untuk tabel transaksi:

1. Tabel : nasabah



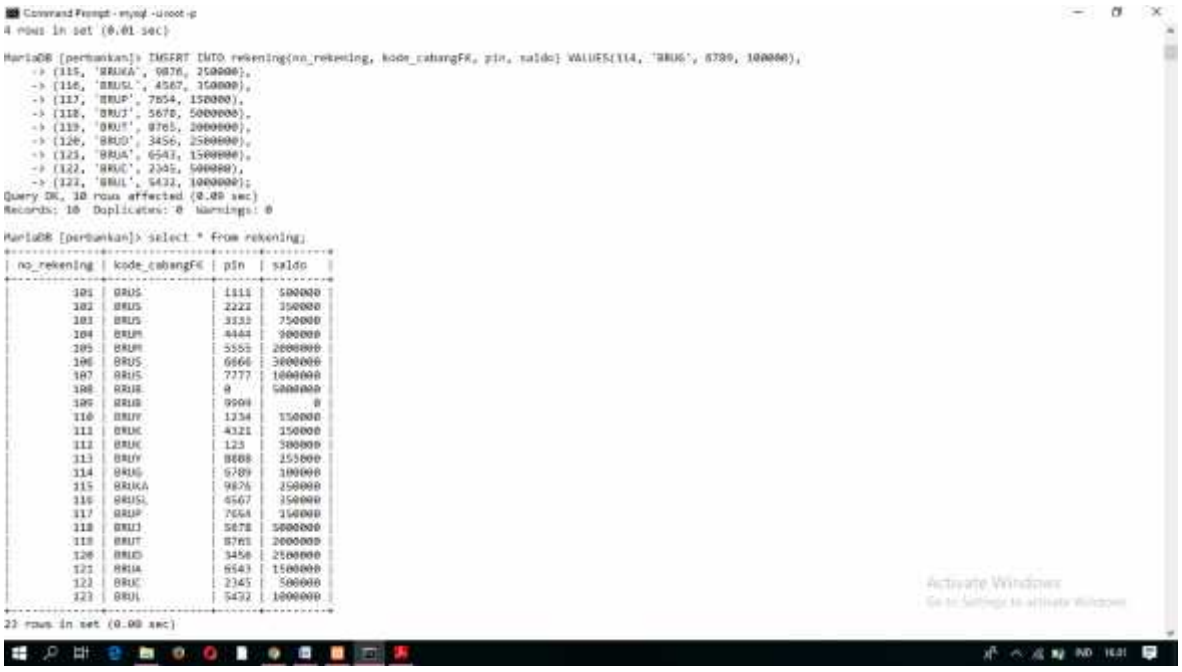
```
MariaDB [perbankan]>
MariaDB [perbankan]> INSERT INTO nasabah(id_nasabah, nama_nasabah, alamat_nasabah) VALUES ('11', 'Intan Larasati', 'Jl. Hlisis 20'),
    -> ('12', 'Palistya Nesty', 'Jl.Blewah 30'),
    -> ('13', 'Sri Hajlati', 'Jl. Rambutan 11'),
    -> ('14', 'Fitri Cahya', 'Jl. Mangga 28'),
    -> ('15', 'Bangkit Arfandio', 'Jl. Garuda 15'),
    -> ('16', 'Azka Nardana', 'Jl. Merpati 5'),
    -> ('17', 'Syaiful Rahmad', 'Jl. Belibis 50'),
    -> ('18', 'Maulana Azka', 'Jl. Elang 24'),
    -> ('19', 'Clavaria Devinci', 'Jl. Manggis 10'),
    -> ('20', 'Nayalia Devava', 'Jl. Dara 35');
Query OK, 10 rows affected (0.00 sec)
Records: 10  Duplicates: 0  Warnings: 0

MariaDB [perbankan]> select * from nasabah;
+------------+-------------------+-----------------------+
| id_nasabah | nama_nasabah      | alamat_nasabah        |
+------------+-------------------+-----------------------+
|          1 | Sutopo            | Jl. Jendral Sudirman 12 |
|          2 | Haryoti           | Jl. MT. Haryono 31    |
|          3 | Suparman          | Jl. Hasanudin 81      |
|          4 | Kartika Padmasari | Jl. Manggis 15        |
|          5 | Budi Eko Prayogo  | Jl. Kantil 30         |
|          6 | Satria Eka Jaya   | Jl. Slamet Riyadi 45  |
|          8 | Sari Murti        | Jl. Pangandaran 11    |
|          9 | Canka Lokananta   | Jl. Tidar 96          |
|         10 | Budi Murtono      | Jl. Merak 22          |
|         11 | Intan Larasati    | Jl. Hlisis 20         |
|         12 | Palistya Nesty    | Jl.Blewah 30          |
|         13 | Sri Hajlati       | Jl. Rambutan 11       |
|         14 | Fitri Cahya       | Jl. Mangga 28         |
|         15 | Bangkit Arfandio  | Jl. Garuda 15         |
|         16 | Azka Nardana      | Jl. Merpati 5         |
|         17 | Syaiful Rahmad    | Jl. Belibis 50        |
|         18 | Maulana Azka      | Jl. Elang 24          |
|         19 | Clavaria Devinci  | Jl. Manggis 10        |
|         20 | Nayalia Devava    | Jl. Dara 35           |
+------------+-------------------+-----------------------+
19 rows in set (0.00 sec)

MariaDB [perbankan]>
```

2. Tabel cabang_bank



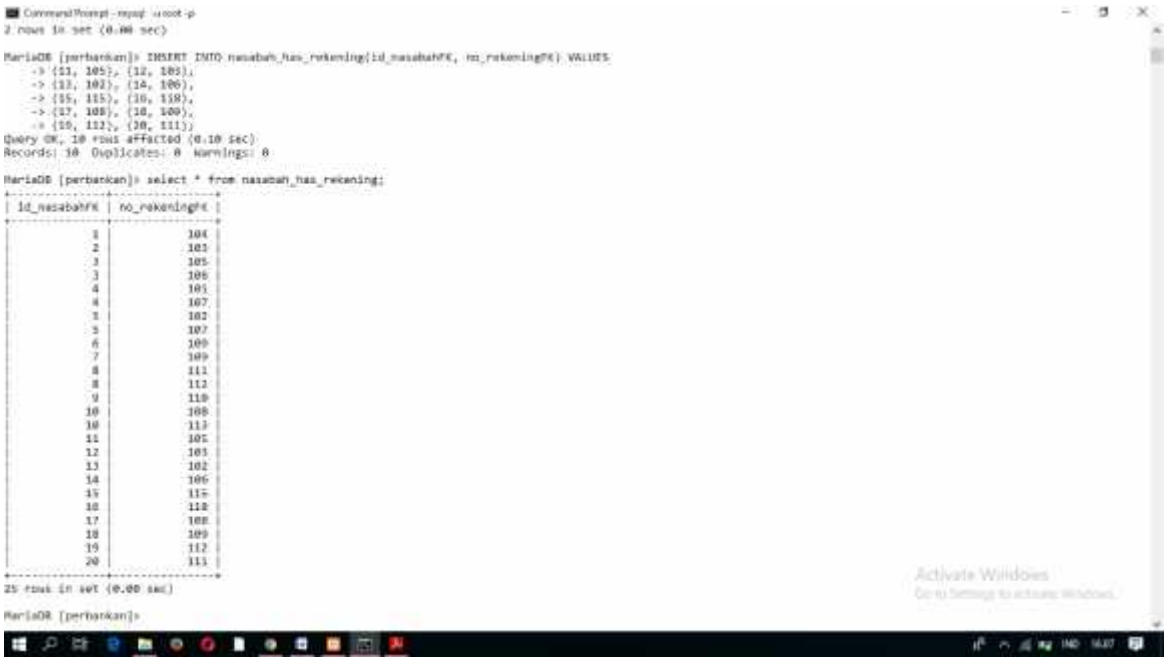
```
MariaDB [perbankan]> INSERT INTO cabang_bank(kode_cabang, nama_cabang, alamat_cabang) VALUES ('BRUSL', 'Bank Rut Unit Salatiga', 'Jl. Dahlia 11'),
    -> ('BRUKA', 'Bank Rut Unit Karanganyar', 'Jl. Melati 13'),
    -> ('BRUJ', 'Bank Rut Unit Jakarta', 'Jl. Mawar 1'),
    -> ('BRUG', 'Bank Rut Unit Gorontalo', 'Jl. Apel 39'),
    -> ('BRUP', 'Bank Rut Unit Padang', 'Jl. Anggur 15'),
    -> ('BRUD', 'Bank Rut Unit Depok', 'Jl. Mangga 20'),
    -> ('BRUA', 'Bank Rut Unit Aceh', 'Jl. Kelengkeng 13'),
    -> ('BRUT', 'Bank Rut Unit Tangerang', 'Jl. Pisang 16'),
    -> ('BRUC', 'Bank Rut Unit Cimahi', 'Jl. Manggis 21'),
    -> ('BRUL', 'Bank Rut Unit Lombok', 'Jl. Jeruk 23');
Query OK, 10 rows affected (0.00 sec)
Records: 10  Duplicates: 0  Warnings: 0

MariaDB [perbankan]> select * from cabang_bank;
+-------------+-------------------------+-------------------+
| kode_cabang | nama_cabang             | alamat_cabang     |
+-------------+-------------------------+-------------------+
| BRUA        | Bank Rut Unit Aceh      | Jl. Kelengkeng 13 |
| BRUB        | Bank Rut Unit Boyolali  | Jl. Ahmad Yani 45 |
| BRUC        | Bank Rut Unit Cimahi    | Jl. Manggis 21    |
| BRUD        | Bank Rut Unit Depok     | Jl. Mangga 20     |
| BRUG        | Bank Rut Unit Gorontalo | Jl. Apel 39       |
| BRUJ        | Bank Rut Unit Jakarta   | Jl. Mawar 1       |
| BRUK        | Bank Rut Unit Klaten    | Jl. Superman 23   |
| BRUKA       | Bank Rut Unit Karanganyar | Jl. Melati 13   |
| BRUL        | Bank Rut Unit Lombok    | Jl. Jeruk 23      |
| BRUP        | Bank Rut Unit Padang    | Jl. Anggur 15     |
| BRUS        | Bank Rut Unit Surakarta | Jl. Slamet Riyadi |
| BRUSL       | Bank Rut Unit Salatiga  | Jl. Dahlia 11     |
| BRUT        | Bank Rut Unit Tangerang | Jl. Pisang 16     |
| BRUW        | Bank Rut Unit Wonogiri  | Jl. A. Yani 23    |
| BRUY        | Bank Rut Unit Yogyakarta | Jl. Anggrek 21   |
+-------------+-------------------------+-------------------+
15 rows in set (0.00 sec)

MariaDB [perbankan]>
```

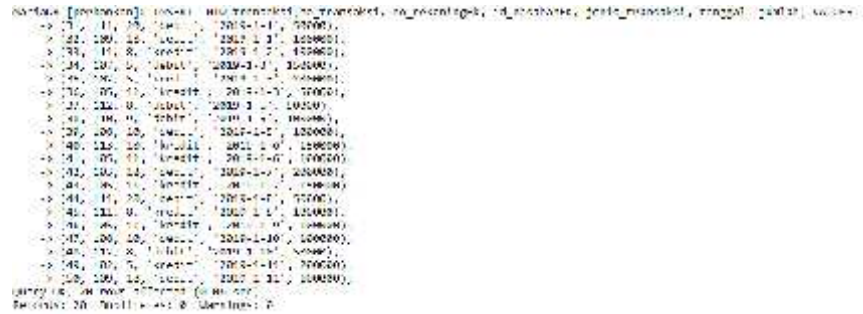
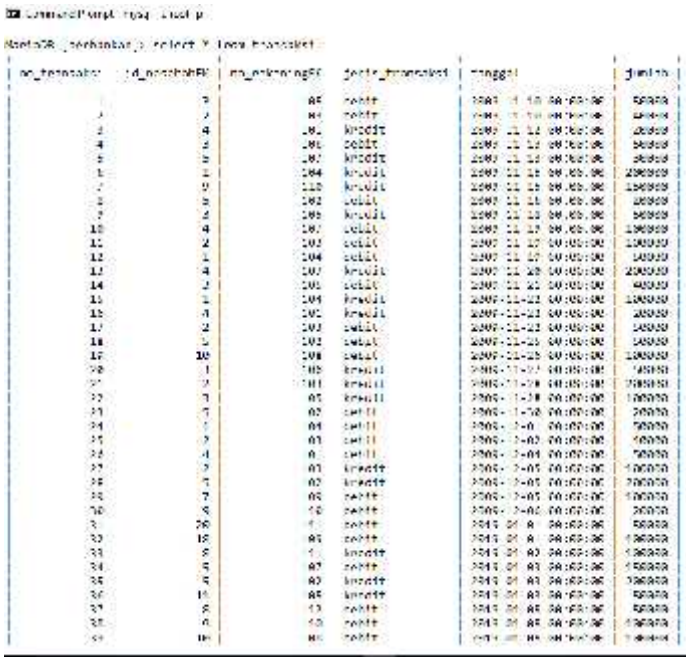
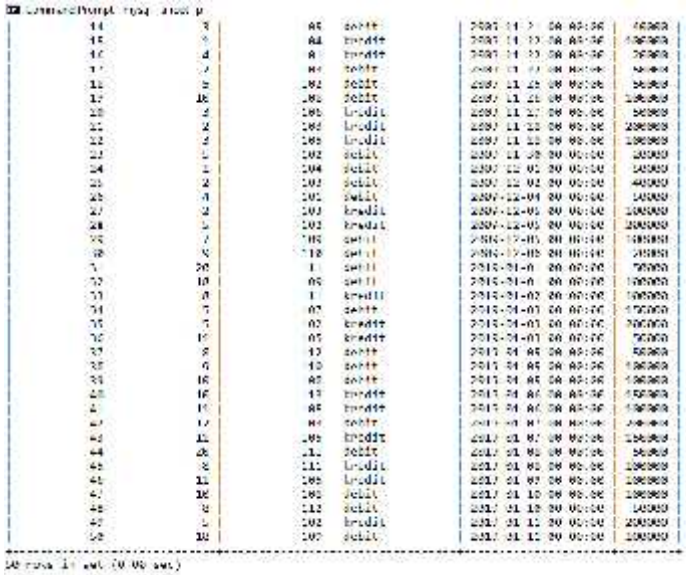
3. Tabel rekening



```
Command Prompt - mysql -u root -p
4 rows in set (0.01 sec)

MariaDB [perbankan]> INSERT INTO rekening(no_rekening, kode_cabangFK, pin, saldo) VALUES(114, 'BRUG', 6789, 100000),
    -> (115, 'BRUKA', 9876, 250000),
    -> (116, 'BRUSL', 4567, 150000),
    -> (117, 'BRUP', 7654, 150000),
    -> (118, 'BRUJ', 5678, 5000000),
    -> (119, 'BRUT', 8765, 2000000),
    -> (120, 'BRUD', 3456, 2500000),
    -> (121, 'BRUA', 6543, 1500000),
    -> (122, 'BRUC', 2345, 500000),
    -> (123, 'BRUL', 5432, 1000000);
Query OK, 10 rows affected (0.00 sec)
Records: 10  Duplicates: 0  Warnings: 0

MariaDB [perbankan]> select * from rekening;
+-------------+----------------+------+---------+
| no_rekening | kode_cabangFK | pin  | saldo   |
+-------------+----------------+------+---------+
|         101 | BRUS           | 1111 |  500000 |
|         102 | BRUS           | 2222 |  150000 |
|         103 | BRUS           | 3333 |  750000 |
|         104 | BRUM           | 4444 |  900000 |
|         105 | BRUM           | 5555 | 2000000 |
|         106 | BRUS           | 6666 | 3000000 |
|         107 | BRUS           | 7777 | 1000000 |
|         108 | BRUB           | 0    | 5000000 |
|         109 | BRUB           | 9999 |       0 |
|         110 | BRUY           | 1234 |  150000 |
|         111 | BRUK           | 4321 |  150000 |
|         112 | BRUC           | 123  |  300000 |
|         113 | BRUY           | 8888 |  255000 |
|         114 | BRUG           | 6789 |  100000 |
|         115 | BRUKA          | 9876 |  250000 |
|         116 | BRUSL          | 4567 |  150000 |
|         117 | BRUP           | 7654 |  150000 |
|         118 | BRUJ           | 5678 | 5000000 |
|         119 | BRUT           | 8765 | 2000000 |
|         120 | BRUD           | 3456 | 2500000 |
|         121 | BRUA           | 6543 | 1500000 |
|         122 | BRUC           | 2345 |  500000 |
|         123 | BRUL           | 5432 | 1000000 |
+-------------+----------------+------+---------+
23 rows in set (0.00 sec)
```

4. Tabel nasabah_has_rekening



```
Command Prompt - mysql -u root -p
2 rows in set (0.00 sec)

MariaDB [perbankan]> INSERT INTO nasabah_has_rekening(id_nasabahFK, no_rekeningFK) VALUES
    -> (11, 105), (12, 103),
    -> (13, 102), (14, 106),
    -> (15, 115), (16, 118),
    -> (17, 108), (18, 109),
    -> (19, 112), (20, 111);
Query OK, 10 rows affected (0.10 sec)
Records: 10  Duplicates: 0  Warnings: 0

MariaDB [perbankan]> select * from nasabah_has_rekening;
+--------------+---------------+
| id_nasabahFK | no_rekeningFK |
+--------------+---------------+
|            1 |           104 |
|            2 |           103 |
|            3 |           105 |
|            3 |           106 |
|            4 |           101 |
|            4 |           107 |
|            5 |           102 |
|            5 |           107 |
|            6 |           109 |
|            7 |           109 |
|            8 |           111 |
|            8 |           112 |
|            9 |           110 |
|           10 |           108 |
|           10 |           113 |
|           11 |           105 |
|           12 |           103 |
|           13 |           102 |
|           14 |           106 |
|           15 |           115 |
|           16 |           118 |
|           17 |           108 |
|           18 |           109 |
|           19 |           112 |
|           20 |           111 |
+--------------+---------------+
25 rows in set (0.00 sec)

MariaDB [perbankan]>
```

5. Tabel transaksi