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Kegiatan Praktikum

1. Memasukan Data-data kedalam database perbankan

Tabel nasabah

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

C:\xampp>cd mysql

C:\xampp\mysql>cd 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 11
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)]> use perbankan;
Database changed
MariaDB [perbankan]> INSERT INTO nasabah(id_nasabah, nama_nasabah, alamat_nasabah) VALUES
  -> (1, 'Sutopo', 'Jl. Jendral Sudirman 12'),
  -> (2, 'Maryati', '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'),
  -> (7, 'Indri Hapsari', 'Jl. Sutoyo 5'),
  -> (8, 'Sari Murti', 'Jl. Pangandaran 11'),
  -> (9, 'Budi Murtono', 'Jl. Merak 22'),
  -> (10, 'Canka Lokananta', 'Jl. Tidar 86');
Query OK, 10 rows affected (0.066 sec)
Records: 10  Duplicates: 0  Warnings: 0
```

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

MariaDB [perbankan]> select * from nasabah;
+-----+-----+-----+
| id_nasabah | nama_nasabah | alamat_nasabah |
+-----+-----+-----+
| 1 | Sutopo | Jl. Jendral Sudirman 12 |
| 2 | Maryati | Jl. MT. Haryono |
| 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 | Budi Murtono | Jl. Merak 22 |
| 10 | Canka Lokananta | Jl. Tidar 86 |
+-----+-----+-----+
9 rows in set (0.000 sec)

MariaDB [perbankan]>
```

Tabel cabang_bank

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

MariaDB [perbankan]> INSERT INTO cabang_bank(kode_cabang, nama_cabang, alamat_cabang) VALUES
-> ('BRUS', 'Bank Rut Unit Surakarta', 'Jl. Slamet Riyadi 18'),
-> ('BRUM', 'Bank Rut Unit Magelang', 'Jl. P. Tendean 63'),
-> ('BRUB', 'Bank Rut Unit Boyolali', 'Jl. Ahmad Yani 45'),
-> ('BRUK', 'Bank Rakyat Unit Klaten', 'Jl. Superman 23'),
-> ('BRUY', 'Bank Rakyat Unit Yogyakarta', 'Jl. Anggrek 21'),
-> ('BRUW', 'Bank Rut Unit Wonogiri', 'Jl. Untung Suropati 12');
Query OK, 6 rows affected (0.056 sec)
Records: 6 Duplicates: 0 Warnings: 0

MariaDB [perbankan]>
```

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

MariaDB [perbankan]> select * from cabang_bank;
+-----+-----+-----+
| kode_cabang | nama_cabang          | alamat_cabang      |
+-----+-----+-----+
| BRUB        | Bank Rut Unit Boyolali | Jl. Ahmad Yani 45  |
| BRUK        | Bank Rakyat Unit Klaten | Jl. Superman 23    |
| BRUS        | Bank Rut Unit Surakarta | Jl. Slamet Riyadi 18 |
| BRUW        | Bank Rut Unit Wonogiri  | Jl. A. Yani No.23  |
| BRUY        | Bank Rakyat Unit Yogyakarta | Jl. Anggrek 21    |
+-----+-----+-----+
5 rows in set (0.000 sec)

MariaDB [perbankan]>
```

Tabel rekening

```
C:\WINDOWS\system32\cmd.exe - mysql -u root -p
-> (113, 'BRUY', '8888', 255000);
ERROR 1054 (42S22): Unknown column 'kode_cabang' in 'field list'
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', 3000000),
-> (107, 'BRUS', '7777', 1000000),
-> (108, 'BRUB', '0000', 5000000),
-> (109, 'BRUB', '9999', 0),
-> (110, 'BRUY', '1234', 550000),
-> (111, 'BRUK', '4321', 150000),
-> (112, 'BRUK', '0123', 300000),
-> (113, 'BRUY', '8888', 255000);
Query OK, 13 rows affected (0.041 sec)
Records: 13 Duplicates: 0 Warnings: 0

MariaDB [perbankan]>
```

```
C:\WINDOWS\system32\cmd.exe - mysql -u root -p
+-----+-----+-----+-----+
| no_rekening | kode_cabangFK | pin | saldo |
+-----+-----+-----+-----+
| 101 | BRUS | 1111 | 500000 |
| 102 | BRUS | 2222 | 350000 |
| 103 | BRUS | 3333 | 750000 |
| 104 | BRUM | 4444 | 900000 |
| 105 | BRUM | 5555 | 2000000 |
| 106 | BRUS | 6666 | 3000000 |
| 107 | BRUS | 7777 | 1000000 |
| 108 | BRUB | 0000 | 5000000 |
| 109 | BRUB | 9999 | 0 |
| 110 | BRUY | 1234 | 550000 |
| 111 | BRUK | 4321 | 150000 |
| 112 | BRUK | 0123 | 300000 |
| 113 | BRUY | 8888 | 255000 |
+-----+-----+-----+-----+
13 rows in set (0.001 sec)

MariaDB [perbankan]>
```

Tabel nasabah_has_rekening

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

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, 109),
-> (7, 109),
-> (8, 111),
-> (9, 110),
-> (10, 113),
-> (8, 112),
-> (10, 108);
Query OK, 15 rows affected (0.052 sec)
Records: 15  Duplicates: 0  Warnings: 0

MariaDB [perbankan]>
```

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

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 |
+-----+-----+
15 rows in set (0.000 sec)

MariaDB [perbankan]>
```

Tabel transaksi

```
C:\WINDOWS\system32\cmd.exe - mysql -u root -p
MariaDB [perbankan]> INSERT INTO transaksi(no_transaksi, no_rekeningFK, id_nasabahFK, jenis_transaksi, tanggal, jumlah)
VALUES
-> (1, 105, 3, 'debit', '2009-11-10', 50000),
-> (2, 103, 2, 'debit', '2009-11-10', 40000),
-> (3, 101, 4, 'kredit', '2009-11-12', 20000),
-> (4, 106, 3, 'debit', '2009-11-13', 50000),
-> (5, 107, 5, 'kredit', '2009-11-13', 30000),
-> (6, 104, 1, 'kredit', '2009-11-15', 200000),
-> (7, 110, 9, 'kredit', '2009-11-15', 150000),
-> (8, 102, 5, 'debit', '2009-11-16', 20000),
-> (9, 105, 3, 'kredit', '2009-11-18', 50000),
-> (10, 107, 4, 'debit', '2009-11-19', 100000),
-> (11, 103, 2, 'debit', '2009-11-19', 100000),
-> (12, 104, 1, 'debit', '2009-11-19', 50000),
-> (13, 107, 4, 'kredit', '2009-11-20', 200000),
-> (14, 105, 3, 'debit', '2009-11-21', 40000),
-> (15, 104, 1, 'kredit', '2009-11-22', 100000),
-> (16, 101, 4, 'kredit', '2009-11-22', 20000),
-> (17, 103, 2, 'debit', '2009-11-22', 50000),
-> (18, 102, 5, 'debit', '2009-11-25', 50000),
-> (19, 108, 10, 'debit', '2009-11-26', 100000),
-> (20, 106, 3, 'kredit', '2009-11-27', 50000),
-> (21, 103, 2, 'kredit', '2009-11-28', 200000),
-> (22, 105, 3, 'kredit', '2009-11-28', 100000),
-> (23, 102, 5, 'debit', '2009-11-30', 20000),
-> (24, 104, 1, 'debit', '2009-12-1', 50000),
-> (25, 103, 2, 'debit', '2009-12-2', 40000),
-> (26, 101, 4, 'debit', '2009-12-4', 50000),
-> (27, 103, 2, 'kredit', '2009-12-5', 100000),
-> (28, 102, 5, 'kredit', '2009-12-5', 200000),
-> (29, 109, 7, 'debit', '2009-12-5', 100000),
-> (30, 110, 9, 'debit', '2009-12-6', 20000);
Query OK, 30 rows affected (0.105 sec)
Records: 30 Duplicates: 0 Warnings: 0
```

```
Select C:\WINDOWS\system32\cmd.exe - mysql -u root -p
MariaDB [perbankan]> select * from transaksi;
+-----+-----+-----+-----+-----+-----+
| no_transaksi | id_nasabahFK | no_rekeningFK | jenis_transaksi | tanggal                | jumlah |
+-----+-----+-----+-----+-----+-----+
| 1           | 3           | 105           | debit           | 2009-11-10 00:00:00    | 50000  |
| 2           | 2           | 103           | debit           | 2009-11-10 00:00:00    | 40000  |
| 3           | 4           | 101           | kredit          | 2009-11-12 00:00:00    | 20000  |
| 4           | 3           | 106           | debit           | 2009-11-13 00:00:00    | 50000  |
| 5           | 5           | 107           | kredit          | 2009-11-13 00:00:00    | 30000  |
| 6           | 1           | 104           | kredit          | 2009-11-15 00:00:00    | 200000 |
| 7           | 9           | 110           | kredit          | 2009-11-15 00:00:00    | 150000 |
| 8           | 5           | 102           | debit           | 2009-11-16 00:00:00    | 20000  |
| 9           | 3           | 105           | kredit          | 2009-11-18 00:00:00    | 50000  |
| 10          | 4           | 107           | debit           | 2009-11-19 00:00:00    | 100000 |
| 11          | 2           | 103           | debit           | 2009-11-19 00:00:00    | 100000 |
| 12          | 1           | 104           | debit           | 2009-11-19 00:00:00    | 50000  |
| 13          | 4           | 107           | kredit          | 2009-11-20 00:00:00    | 200000 |
| 14          | 3           | 105           | debit           | 2009-11-21 00:00:00    | 40000  |
| 15          | 1           | 104           | kredit          | 2009-11-22 00:00:00    | 100000 |
| 16          | 4           | 101           | kredit          | 2009-11-22 00:00:00    | 20000  |
| 17          | 2           | 103           | debit           | 2009-11-22 00:00:00    | 50000  |
| 18          | 5           | 102           | debit           | 2009-11-25 00:00:00    | 50000  |
| 19          | 10          | 108           | debit           | 2009-11-26 00:00:00    | 100000 |
| 20          | 3           | 106           | kredit          | 2009-11-27 00:00:00    | 50000  |
| 21          | 2           | 103           | kredit          | 2009-11-28 00:00:00    | 200000 |
| 22          | 3           | 105           | kredit          | 2009-11-28 00:00:00    | 100000 |
| 23          | 5           | 102           | debit           | 2009-11-30 00:00:00    | 20000  |
| 24          | 1           | 104           | debit           | 2009-12-01 00:00:00    | 50000  |
| 25          | 2           | 103           | debit           | 2009-12-02 00:00:00    | 40000  |
| 26          | 4           | 101           | debit           | 2009-12-04 00:00:00    | 50000  |
| 27          | 2           | 103           | kredit          | 2009-12-05 00:00:00    | 100000 |
| 28          | 5           | 102           | kredit          | 2009-12-05 00:00:00    | 200000 |
| 29          | 7           | 109           | debit           | 2009-12-05 00:00:00    | 100000 |
| 30          | 9           | 110           | debit           | 2009-12-06 00:00:00    | 20000  |
+-----+-----+-----+-----+-----+-----+
```

2. Update Untuk Kasus Berikut

Tabel nasabah

```
C:\WINDOWS\system32\cmd.exe - mysql -u root -p
Rows matched: 1  Changed: 1  Warnings: 0

MariaDB [perbankan]> select * from nasabah;
+-----+-----+-----+
| id_nasabah | nama_nasabah | alamat_nasabah |
+-----+-----+-----+
| 1 | Sutopo | Jl. Jendral Sudirman 12 |
| 2 | Maryati | Jl. MT. Haryono |
| 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 |
| 7 | Indri Hapsari | Jl. Slamet Riyadi 34 |
| 8 | Sari Murti | Jl. Pangandaran 11 |
| 9 | Budi Murtono | Jl. Merak 22 |
| 10 | Canka Lokananta | Jl. Tidar 86 |
+-----+-----+-----+
10 rows in set (0.000 sec)

MariaDB [perbankan]>
```

Tabel cabang

```
C:\WINDOWS\system32\cmd.exe - mysql -u root -p
MariaDB [perbankan]> select * from cabang_bank;
+-----+-----+-----+
| kode_cabang | nama_cabang | alamat_cabang |
+-----+-----+-----+
| BRUB | Bank Rut Unit Boyolali | Jl. Ahmad Yani 45 |
| BRUK | Bank Rakyat Unit Klaten | Jl. Suparman 23 |
| BRUM | Bank Rut Unit Magelang | Jl. P. Tendean 63 |
| BRUS | Bank Rut Unit Surakarta | Jl. Slamet Riyadi 18 |
| BRUW | Bank Rut Unit Wonogiri | Jl. A. Yani No.23 |
| BRUY | Bank Rakyat Unit Yogyakarta | Jl. Anggrek 21 |
+-----+-----+-----+
6 rows in set (0.000 sec)

MariaDB [perbankan]>
```

3. Penghapusan Data

Tabel Nasabah

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

+-----+-----+-----+
| BRUS   | Bank Rut Unit Surakarta | Jl. Slamet Riyadi 18 |
| BRUW   | Bank Rut Unit Wonogiri  | Jl. A. Yani No.23   |
| BRUY   | Bank Rakyat Unit Yogyakarta | Jl. Anggrek 21      |
+-----+-----+-----+
6 rows in set (0.000 sec)

MariaDB [perbankan]> delete fromj nasabah where id_nasabah=7;
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 'nasabah where id_nasabah=7' at line 1
MariaDB [perbankan]> delete from nasabah where id_nasabah=7;
Query OK, 1 row affected (0.040 sec)

MariaDB [perbankan]> select * from nasabah;
+-----+-----+-----+
| id_nasabah | nama_nasabah | alamat_nasabah |
+-----+-----+-----+
| 1 | Sutopo | Jl. Jendral Sudirman 12 |
| 2 | Maryati | Jl. MT. Haryono |
| 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 | Budi Murtono | Jl. Merak 22 |
| 10 | Canka Lokananta | Jl. Tidar 86 |
+-----+-----+-----+
9 rows in set (0.000 sec)

MariaDB [perbankan]>
```

Tabel Cabang

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

MariaDB [perbankan]> select * from cabang_bank;
+-----+-----+-----+
| kode_cabang | nama_cabang | alamat_cabang |
+-----+-----+-----+
| BRUB   | Bank Rut Unit Boyolali | Jl. Ahmad Yani 45 |
| BRUK   | Bank Rakyat Unit Klaten | Jl. Suparman 23 |
| BRUS   | Bank Rut Unit Surakarta | Jl. Slamet Riyadi 18 |
| BRUW   | Bank Rut Unit Wonogiri | Jl. A. Yani No.23 |
| BRUY   | Bank Rakyat Unit Yogyakarta | Jl. Anggrek 21 |
+-----+-----+-----+
5 rows in set (0.000 sec)

MariaDB [perbankan]>
```

Tugas

1. Table nasabah

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

MariaDB [perbankan]> insert into nasabah(id_nasabah, nama_nasabah, alamat_nasabah) values(11, 'Hafidh', 'Pandeyan');
Query OK, 1 row affected (0.032 sec)

MariaDB [perbankan]> insert into nasabah(id_nasabah, nama_nasabah, alamat_nasabah) values(12, 'Putra', 'Kiringan');
Query OK, 1 row affected (0.028 sec)

MariaDB [perbankan]> insert into nasabah(id_nasabah, nama_nasabah, alamat_nasabah) values(13, 'Andhika', 'Boyolali');
Query OK, 1 row affected (0.033 sec)

MariaDB [perbankan]> insert into nasabah(id_nasabah, nama_nasabah, alamat_nasabah) values(14, 'Muchfatan', 'Gentan');
Query OK, 1 row affected (0.034 sec)

MariaDB [perbankan]> insert into nasabah(id_nasabah, nama_nasabah, alamat_nasabah) values(15, 'Rahmadhan', 'Sukoharjo');
Query OK, 1 row affected (0.040 sec)

MariaDB [perbankan]> insert into nasabah(id_nasabah, nama_nasabah, alamat_nasabah) values(16, 'Anang', 'Jebres');
Query OK, 1 row affected (0.060 sec)

MariaDB [perbankan]> insert into nasabah(id_nasabah, nama_nasabah, alamat_nasabah) values(17, 'Prasetyo', 'Surakarta');
Query OK, 1 row affected (0.037 sec)

MariaDB [perbankan]> insert into nasabah(id_nasabah, nama_nasabah, alamat_nasabah) values(18, 'Malik', 'Gatak');
Query OK, 1 row affected (0.031 sec)

MariaDB [perbankan]> insert into nasabah(id_nasabah, nama_nasabah, alamat_nasabah) values(19, 'Muhammad', 'Gonilan');
Query OK, 1 row affected (0.030 sec)

MariaDB [perbankan]> insert into nasabah(id_nasabah, nama_nasabah, alamat_nasabah) values(20, 'Alif', 'Sukoharjo');
Query OK, 1 row affected (0.029 sec)

MariaDB [perbankan]> insert into nasabah(id_nasabah, nama_nasabah, alamat_nasabah) values(21, 'Al Amin', 'Sukoharjo');
Query OK, 1 row affected (0.045 sec)

MariaDB [perbankan]> select * from nasabah;
```

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

Query OK, 1 row affected (0.045 sec)

MariaDB [perbankan]> select * from nasabah;
+-----+-----+-----+
| id_nasabah | nama_nasabah | alamat_nasabah |
+-----+-----+-----+
| 1 | Sutopo | Jl. Jendral Sudirman 12 |
| 2 | Maryati | Jl. MT. Haryono |
| 3 | Suparman | Jl. Hasanudin 81 |
| 4 | Kartika Padmasari | Jl. Manggis 15 |
| 5 | Budi Eko Prayogo | Jl. Kantil 30 |
| 6 | Satnia Eka Jaya | Jl. Slamet Riyadi 45 |
| 8 | Sari Murti | Jl. Pangandaran 11 |
| 9 | Budi Murtono | Jl. Merak 22 |
| 10 | Canka Lokananta | Jl. Tidar 86 |
| 11 | Hafidh | Pandeyan |
| 12 | Putra | Kiringan |
| 13 | Andhika | Boyolali |
| 14 | Muchfatan | Gentan |
| 15 | Rahmadhan | Sukoharjo |
| 16 | Anang | Jebres |
| 17 | Prasetyo | Surakarta |
| 18 | Malik | Gatak |
| 19 | Muhammad | Gonilan |
| 20 | Alif | Sukoharjo |
| 21 | Al Amin | Sukoharjo |
+-----+-----+-----+
20 rows in set (0.000 sec)

MariaDB [perbankan]>
```

2. Table cabang_bank


```
C:\WINDOWS\system32\cmd.exe - mysql -u root -p
MariaDB [perbankan]> insert into cabang_bank(kode_cabang, nama_cabang, alamat_cabang) values ('BRUU', 'Bank Rut Unit UMS', 'Jl. Ahmad Yani 1');
Query OK, 1 row affected (0.041 sec)

MariaDB [perbankan]> insert into cabang_bank(kode_cabang, nama_cabang, alamat_cabang) values ('BRUP', 'Bank Rut Unit Pandeyan', 'Jl. Tentara Penajar 11');
Query OK, 1 row affected (0.082 sec)

MariaDB [perbankan]> insert into cabang_bank(kode_cabang, nama_cabang, alamat_cabang) values ('BRUKR', 'Bank Rut Unit Kiringan', 'Jl. Tentara Pelajar 101');
Query OK, 1 row affected (0.039 sec)

MariaDB [perbankan]> insert into cabang_bank(kode_cabang, nama_cabang, alamat_cabang) values ('BRUG', 'Bank Rut Unit Gonilan', 'Jl. Gonilan 51');
Query OK, 1 row affected (0.037 sec)

MariaDB [perbankan]> insert into cabang_bank(kode_cabang, nama_cabang, alamat_cabang) values ('BRUMC', 'Bank Rut Unit Menco', 'Jl. Menco Raya 1');
Query OK, 1 row affected (0.055 sec)

MariaDB [perbankan]> insert into cabang_bank(kode_cabang, nama_cabang, alamat_cabang) values ('BRUMH', 'Bank Rut Unit Makam Haji', 'Jl. Makam Haji 111');
Query OK, 1 row affected (0.039 sec)

MariaDB [perbankan]> insert into cabang_bank(kode_cabang, nama_cabang, alamat_cabang) values ('BRUJ', 'Bank Rut Unit Jebres', 'Jl. Jebres Raya 21');
Query OK, 1 row affected (0.052 sec)

MariaDB [perbankan]> insert into cabang_bank(kode_cabang, nama_cabang, alamat_cabang) values ('BRUPP', 'Bank Rut Unit Papahan', 'Jl. Papahan 212');
Query OK, 1 row affected (0.041 sec)

MariaDB [perbankan]> insert into cabang_bank(kode_cabang, nama_cabang, alamat_cabang) values ('BRUSH', 'Bank Rut Unit Sukoharjo', 'Jl. Veteran 1');
Query OK, 1 row affected (0.043 sec)

MariaDB [perbankan]> insert into cabang_bank(kode_cabang, nama_cabang, alamat_cabang) values ('BRUDL', 'Bank Rut Unit Delanggu', 'Jl. Moh Yamin 141');
Query OK, 1 row affected (0.045 sec)

MariaDB [perbankan]> select * from cabang_bank;
+-----+-----+-----+
| kode_cabang | nama_cabang | alamat_cabang |
+-----+-----+-----+
```

```
C:\WINDOWS\system32\cmd.exe - mysql -u root -p
MariaDB [perbankan]> select * from cabang_bank;
+-----+-----+-----+
| kode_cabang | nama_cabang | alamat_cabang |
+-----+-----+-----+
| BRUB | Bank Rut Unit Boyolali | Jl. Ahmad Yani 45 |
| BRUDL | Bank Rut Unit Delanggu | Jl. Moh Yamin 141 |
| BRUG | Bank Rut Unit Gonilan | Jl. Gonilan 51 |
| BRUJ | Bank Rut Unit Jebres | Jl. Jebres Raya 21 |
| BRUK | Bank Rakyat Unit Klaten | Jl. Superman 23 |
| BRUKR | Bank Rut Unit Kiringan | Jl. Tentara Pelajar 101 |
| BRUMC | Bank Rut Unit Menco | Jl. Menco Raya 1 |
| BRUMH | Bank Rut Unit Makam Haji | Jl. Makam Haji 111 |
| BRUP | Bank Rut Unit Pandeyan | Jl. Tentara Penajar 11 |
| BRUPP | Bank Rut Unit Papahan | Jl. Papahan 212 |
| BRUS | Bank Rut Unit Surakarta | Jl. Slamet Riyadi 18 |
| BRUSH | Bank Rut Unit Sukoharjo | Jl. Veteran 1 |
| BRUU | Bank Rut Unit UMS | Jl. Ahmad Yani 1 |
| BRUW | Bank Rut Unit Wonogiri | Jl. A. Yani No.23 |
| BRUY | Bank Rakyat Unit Yogyakarta | Jl. Anggrek 21 |
+-----+-----+-----+
15 rows in set (0.000 sec)

MariaDB [perbankan]>
```

3. Table reckoning

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

MariaDB [perbankan]> insert into rekening(no_rekening, kode_cabangFK, pin, saldo) values (114, 'BRUDL', '6161', 100000);
Query OK, 1 row affected (0.042 sec)

MariaDB [perbankan]> insert into rekening(no_rekening, kode_cabangFK, pin, saldo) values (115, 'BRUG', '1531', 500000);
Query OK, 1 row affected (0.041 sec)

MariaDB [perbankan]> insert into rekening(no_rekening, kode_cabangFK, pin, saldo) values (116, 'BRUY', '0179', 80000);
Query OK, 1 row affected (0.045 sec)

MariaDB [perbankan]> insert into rekening(no_rekening, kode_cabangFK, pin, saldo) values (117, 'BRUSH', '7356', 900000);
Query OK, 1 row affected (0.035 sec)

MariaDB [perbankan]> insert into rekening(no_rekening, kode_cabangFK, pin, saldo) values (118, 'BRUB', '7490', 710000);
Query OK, 1 row affected (0.037 sec)

MariaDB [perbankan]> insert into rekening(no_rekening, kode_cabangFK, pin, saldo) values (119, 'BRUU', '9472', 500000);
Query OK, 1 row affected (0.041 sec)

MariaDB [perbankan]> insert into rekening(no_rekening, kode_cabangFK, pin, saldo) values (120, 'BRUP', '8427', 100000);
Query OK, 1 row affected (0.037 sec)

MariaDB [perbankan]> insert into rekening(no_rekening, kode_cabangFK, pin, saldo) values (121, 'BRUP', '5891', 105000);
Query OK, 1 row affected (0.041 sec)

MariaDB [perbankan]> insert into rekening(no_rekening, kode_cabangFK, pin, saldo) values (122, 'BRUSH', '2807', 2000000);
Query OK, 1 row affected (0.037 sec)

MariaDB [perbankan]> insert into rekening(no_rekening, kode_cabangFK, pin, saldo) values (123, 'BRUY', '8585', 500000);
Query OK, 1 row affected (0.038 sec)

MariaDB [perbankan]> insert into rekening(no_rekening, kode_cabangFK, pin, saldo) values (124, 'BRUB', '6969', 100000);
Query OK, 1 row affected (0.050 sec)
```

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

MariaDB [perbankan]> select * from rekening;
+-----+-----+-----+-----+
| no_rekening | kode_cabangFK | pin | saldo |
+-----+-----+-----+-----+
| 101 | BRUS | 1111 | 500000 |
| 102 | BRUS | 2222 | 350000 |
| 103 | BRUS | 3333 | 750000 |
| 104 | BRUM | 4444 | 900000 |
| 105 | BRUM | 5555 | 2000000 |
| 106 | BRUS | 6666 | 3000000 |
| 107 | BRUS | 7777 | 1000000 |
| 108 | BRUB | 0000 | 5000000 |
| 109 | BRUB | 9999 | 0 |
| 110 | BRUY | 1234 | 550000 |
| 111 | BRUK | 4321 | 150000 |
| 112 | BRUK | 0123 | 300000 |
| 113 | BRUY | 8888 | 255000 |
| 114 | BRUDL | 6161 | 100000 |
| 115 | BRUG | 1531 | 500000 |
| 116 | BRUY | 0179 | 80000 |
| 117 | BRUSH | 7356 | 900000 |
| 118 | BRUB | 7490 | 710000 |
| 119 | BRUU | 9472 | 500000 |
| 120 | BRUP | 8427 | 100000 |
| 121 | BRUP | 5891 | 105000 |
| 122 | BRUSH | 2807 | 2000000 |
| 123 | BRUY | 8585 | 500000 |
| 124 | BRUB | 6969 | 100000 |
+-----+-----+-----+-----+
24 rows in set (0.000 sec)

MariaDB [perbankan]>
```

4. Table transaksi

```
C:\WINDOWS\system32\cmd.exe - mysql -u root -p
Query OK, 1 row affected (0.047 sec)

MariaDB [perbankan]> insert into transaksi(no_transaksi, id_nasabahFK, no_rekeningFK, jenis_transaksi, tanggal, jumlah)
values (21, 102, 2, 'debit', '2020-01-02', 200000);
ERROR 1062 (23000): Duplicate entry '21' for key 'PRIMARY'
MariaDB [perbankan]> insert into transaksi(no_transaksi, id_nasabahFK, no_rekeningFK, jenis_transaksi, tanggal, jumlah)
values (31, 102, 2, 'debit', '2020-01-02', 200000);
ERROR 1062 (23000): Duplicate entry '31' for key 'PRIMARY'
MariaDB [perbankan]> insert into transaksi(no_transaksi, id_nasabahFK, no_rekeningFK, jenis_transaksi, tanggal, jumlah)
values (32, 102, 2, 'debit', '2020-01-02', 200000);
Query OK, 1 row affected (0.034 sec)

MariaDB [perbankan]> insert into transaksi(no_transaksi, id_nasabahFK, no_rekeningFK, jenis_transaksi, tanggal, jumlah)
values (33, 103, 3, 'debit', '2020-01-03', 300000);
Query OK, 1 row affected (0.030 sec)

MariaDB [perbankan]> insert into transaksi(no_transaksi, id_nasabahFK, no_rekeningFK, jenis_transaksi, tanggal, jumlah)
values (34, 104, 4, 'debit', '2020-01-04', 400000);
Query OK, 1 row affected (0.033 sec)

MariaDB [perbankan]> insert into transaksi(no_transaksi, id_nasabahFK, no_rekeningFK, jenis_transaksi, tanggal, jumlah)
values (35, 105, 5, 'debit', '2020-01-05', 500000);
Query OK, 1 row affected (0.037 sec)

MariaDB [perbankan]> insert into transaksi(no_transaksi, id_nasabahFK, no_rekeningFK, jenis_transaksi, tanggal, jumlah)
values (36, 106, 6, 'debit', '2020-01-06', 600000);
Query OK, 1 row affected (0.035 sec)

MariaDB [perbankan]> insert into transaksi(no_transaksi, id_nasabahFK, no_rekeningFK, jenis_transaksi, tanggal, jumlah)
values (37, 107, 7, 'debit', '2020-01-07', 700000);
Query OK, 1 row affected (0.026 sec)

MariaDB [perbankan]> insert into transaksi(no_transaksi, id_nasabahFK, no_rekeningFK, jenis_transaksi, tanggal, jumlah)
values (38, 108, 8, 'debit', '2020-01-08', 700000);
Query OK, 1 row affected, 1 warning (0.034 sec)

MariaDB [perbankan]> insert into transaksi(no_transaksi, id_nasabahFK, no_rekeningFK, jenis_transaksi, tanggal, jumlah)
values (39, 109, 9, 'debit', '2020-01-09', 900000);
Query OK, 1 row affected (0.036 sec)

MariaDB [perbankan]> insert into transaksi(no_transaksi, id_nasabahFK, no_rekeningFK, jenis_transaksi, tanggal, jumlah)
values (40, 110, 10, 'debit', '2020-01-10', 1000000);
Query OK, 1 row affected (0.031 sec)
```

```
C:\WINDOWS\system32\cmd.exe - mysql -u root -p
Query OK, 1 row affected (0.031 sec)

MariaDB [perbankan]> insert into transaksi(no_transaksi, id_nasabahFK, no_rekeningFK, jenis_transaksi, tanggal, jumlah)
values (41, 11, 10, 'debit', '2020-01-10', 1000000);
Query OK, 1 row affected (0.041 sec)

MariaDB [perbankan]> insert into transaksi(no_transaksi, id_nasabahFK, no_rekeningFK, jenis_transaksi, tanggal, jumlah)
values (42, 102, 12, 'kredit', '2020-01-12', 200000);
Query OK, 1 row affected (0.041 sec)

MariaDB [perbankan]> insert into transaksi(no_transaksi, id_nasabahFK, no_rekeningFK, jenis_transaksi, tanggal, jumlah)
values (43, 103, 13, 'kredit', '2020-01-13', 300000);
Query OK, 1 row affected (0.039 sec)

MariaDB [perbankan]> insert into transaksi(no_transaksi, id_nasabahFK, no_rekeningFK, jenis_transaksi, tanggal, jumlah)
values (44, 103, 14, 'kredit', '2020-01-14', 400000);
Query OK, 1 row affected (0.036 sec)

MariaDB [perbankan]> insert into transaksi(no_transaksi, id_nasabahFK, no_rekeningFK, jenis_transaksi, tanggal, jumlah)
values (45, 105, 15, 'kredit', '2020-01-15', 500000);
Query OK, 1 row affected (0.031 sec)

MariaDB [perbankan]> insert into transaksi(no_transaksi, id_nasabahFK, no_rekeningFK, jenis_transaksi, tanggal, jumlah)
values (46, 106, 16, 'kredit', '2020-01-16', 600000);
Query OK, 1 row affected (0.032 sec)

MariaDB [perbankan]> insert into transaksi(no_transaksi, id_nasabahFK, no_rekeningFK, jenis_transaksi, tanggal, jumlah)
values (47, 107, 17, 'kredit', '2020-01-17', 700000);
Query OK, 1 row affected (0.037 sec)

MariaDB [perbankan]> insert into transaksi(no_transaksi, id_nasabahFK, no_rekeningFK, jenis_transaksi, tanggal, jumlah)
values (48, 108, 18, 'kredit', '2020-01-18', 800000);
Query OK, 1 row affected (0.039 sec)

MariaDB [perbankan]> insert into transaksi(no_transaksi, id_nasabahFK, no_rekeningFK, jenis_transaksi, tanggal, jumlah)
values (49, 109, 19, 'kredit', '2020-01-19', 900000);
Query OK, 1 row affected (0.037 sec)

MariaDB [perbankan]> insert into transaksi(no_transaksi, id_nasabahFK, no_rekeningFK, jenis_transaksi, tanggal, jumlah)
values (50, 110, 20, 'kredit', '2020-01-20', 1000000);
Query OK, 1 row affected (0.031 sec)

MariaDB [perbankan]> select * from transaksi;
```

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

MariaDB [perbankan]> select * from transaksi;

| no_transaksi | id_nasabahFK | no_rekeningFK | jenis_transaksi | tanggal | jumlah |
|--------------|--------------|---------------|-----------------|---------------------|---------|
| 1 | 3 | 105 | debit | 2009-11-10 00:00:00 | 50000 |
| 2 | 2 | 103 | debit | 2009-11-10 00:00:00 | 40000 |
| 3 | 4 | 101 | kredit | 2009-11-12 00:00:00 | 20000 |
| 4 | 3 | 106 | debit | 2009-11-13 00:00:00 | 50000 |
| 5 | 5 | 107 | kredit | 2009-11-13 00:00:00 | 30000 |
| 6 | 1 | 104 | kredit | 2009-11-15 00:00:00 | 200000 |
| 7 | 9 | 110 | kredit | 2009-11-15 00:00:00 | 150000 |
| 8 | 5 | 102 | debit | 2009-11-16 00:00:00 | 20000 |
| 9 | 3 | 105 | kredit | 2009-11-18 00:00:00 | 50000 |
| 10 | 4 | 107 | debit | 2009-11-19 00:00:00 | 100000 |
| 11 | 2 | 103 | debit | 2009-11-19 00:00:00 | 100000 |
| 12 | 1 | 104 | debit | 2009-11-19 00:00:00 | 50000 |
| 13 | 4 | 107 | kredit | 2009-11-20 00:00:00 | 200000 |
| 14 | 3 | 105 | debit | 2009-11-21 00:00:00 | 40000 |
| 15 | 1 | 104 | kredit | 2009-11-22 00:00:00 | 100000 |
| 16 | 4 | 101 | kredit | 2009-11-22 00:00:00 | 20000 |
| 17 | 2 | 103 | debit | 2009-11-22 00:00:00 | 50000 |
| 18 | 5 | 102 | debit | 2009-11-25 00:00:00 | 50000 |
| 19 | 10 | 108 | debit | 2009-11-26 00:00:00 | 100000 |
| 20 | 3 | 106 | kredit | 2009-11-27 00:00:00 | 50000 |
| 21 | 2 | 103 | kredit | 2009-11-28 00:00:00 | 200000 |
| 22 | 3 | 105 | kredit | 2009-11-28 00:00:00 | 100000 |
| 23 | 5 | 102 | debit | 2009-11-30 00:00:00 | 20000 |
| 24 | 1 | 104 | debit | 2009-12-01 00:00:00 | 50000 |
| 25 | 2 | 103 | debit | 2009-12-02 00:00:00 | 40000 |
| 26 | 4 | 101 | debit | 2009-12-04 00:00:00 | 50000 |
| 27 | 2 | 103 | kredit | 2009-12-05 00:00:00 | 100000 |
| 28 | 5 | 102 | kredit | 2009-12-05 00:00:00 | 200000 |
| 29 | 7 | 109 | debit | 2009-12-05 00:00:00 | 100000 |
| 30 | 9 | 110 | debit | 2009-12-06 00:00:00 | 20000 |
| 31 | 101 | 1 | debit | 2020-01-01 00:00:00 | 100000 |
| 32 | 102 | 2 | debit | 2020-01-02 00:00:00 | 200000 |
| 33 | 103 | 3 | debit | 2020-01-03 00:00:00 | 300000 |
| 34 | 104 | 4 | debit | 2020-01-04 00:00:00 | 400000 |
| 35 | 105 | 5 | debit | 2020-01-05 00:00:00 | 500000 |
| 36 | 106 | 6 | debit | 2020-01-06 00:00:00 | 600000 |
| 37 | 107 | 7 | debit | 2020-01-07 00:00:00 | 700000 |
| 38 | 108 | 8 | debit | 0000-00-00 00:00:00 | 700000 |
| 39 | 109 | 9 | debit | 2020-01-09 00:00:00 | 900000 |
| 40 | 110 | 10 | debit | 2020-01-10 00:00:00 | 1000000 |
| 41 | 11 | 10 | debit | 2020-01-10 00:00:00 | 1000000 |
| 42 | 102 | 12 | kredit | 2020-01-12 00:00:00 | 200000 |

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

| | | | | | |
|----|-----|-----|--------|---------------------|---------|
| 22 | 3 | 105 | kredit | 2009-11-28 00:00:00 | 100000 |
| 23 | 5 | 102 | debit | 2009-11-30 00:00:00 | 20000 |
| 24 | 1 | 104 | debit | 2009-12-01 00:00:00 | 50000 |
| 25 | 2 | 103 | debit | 2009-12-02 00:00:00 | 40000 |
| 26 | 4 | 101 | debit | 2009-12-04 00:00:00 | 50000 |
| 27 | 2 | 103 | kredit | 2009-12-05 00:00:00 | 100000 |
| 28 | 5 | 102 | kredit | 2009-12-05 00:00:00 | 200000 |
| 29 | 7 | 109 | debit | 2009-12-05 00:00:00 | 100000 |
| 30 | 9 | 110 | debit | 2009-12-06 00:00:00 | 20000 |
| 31 | 101 | 1 | debit | 2020-01-01 00:00:00 | 100000 |
| 32 | 102 | 2 | debit | 2020-01-02 00:00:00 | 200000 |
| 33 | 103 | 3 | debit | 2020-01-03 00:00:00 | 300000 |
| 34 | 104 | 4 | debit | 2020-01-04 00:00:00 | 400000 |
| 35 | 105 | 5 | debit | 2020-01-05 00:00:00 | 500000 |
| 36 | 106 | 6 | debit | 2020-01-06 00:00:00 | 600000 |
| 37 | 107 | 7 | debit | 2020-01-07 00:00:00 | 700000 |
| 38 | 108 | 8 | debit | 0000-00-00 00:00:00 | 700000 |
| 39 | 109 | 9 | debit | 2020-01-09 00:00:00 | 900000 |
| 40 | 110 | 10 | debit | 2020-01-10 00:00:00 | 1000000 |
| 41 | 11 | 10 | debit | 2020-01-10 00:00:00 | 1000000 |
| 42 | 102 | 12 | kredit | 2020-01-12 00:00:00 | 200000 |
| 43 | 103 | 13 | kredit | 2020-01-13 00:00:00 | 300000 |
| 44 | 103 | 14 | kredit | 2020-01-14 00:00:00 | 400000 |
| 45 | 105 | 15 | kredit | 2020-01-15 00:00:00 | 500000 |
| 46 | 106 | 16 | kredit | 2020-01-16 00:00:00 | 600000 |
| 47 | 107 | 17 | kredit | 2020-01-17 00:00:00 | 700000 |
| 48 | 108 | 18 | kredit | 2020-01-18 00:00:00 | 800000 |
| 49 | 109 | 19 | kredit | 2020-01-19 00:00:00 | 900000 |
| 50 | 110 | 20 | kredit | 2020-01-20 00:00:00 | 1000000 |

5. Melakukan perintah Insert, Update, dan Delete di tugas

Insert

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

+-----+-----+-----+-----+-----+-----+-----+
| 34 | 104 | 4 | debit | 2020-01-04 00:00:00 | 400000 |
| 35 | 105 | 5 | debit | 2020-01-05 00:00:00 | 500000 |
| 36 | 106 | 6 | debit | 2020-01-06 00:00:00 | 600000 |
| 37 | 107 | 7 | debit | 2020-01-07 00:00:00 | 700000 |
| 38 | 108 | 8 | debit | 0000-00-00 00:00:00 | 700000 |
| 39 | 109 | 9 | debit | 2020-01-09 00:00:00 | 900000 |
| 40 | 110 | 10 | debit | 2020-01-10 00:00:00 | 1000000 |
| 41 | 11 | 10 | debit | 2020-01-10 00:00:00 | 1000000 |
| 42 | 102 | 12 | kredit | 2020-01-12 00:00:00 | 200000 |
| 43 | 103 | 13 | kredit | 2020-01-13 00:00:00 | 300000 |
| 44 | 103 | 14 | kredit | 2020-01-14 00:00:00 | 400000 |
| 45 | 105 | 15 | kredit | 2020-01-15 00:00:00 | 500000 |
| 46 | 106 | 16 | kredit | 2020-01-16 00:00:00 | 600000 |
| 47 | 107 | 17 | kredit | 2020-01-17 00:00:00 | 700000 |
| 48 | 108 | 18 | kredit | 2020-01-18 00:00:00 | 800000 |
| 49 | 109 | 19 | kredit | 2020-01-19 00:00:00 | 900000 |
| 50 | 110 | 20 | kredit | 2020-01-20 00:00:00 | 1000000 |
+-----+-----+-----+-----+-----+-----+-----+
50 rows in set (0.013 sec)

MariaDB [perbankan]> insert into transaksi(no_transaksi, id_nasabahFK, no_rekeningFK, jenis_transaksi, tanggal, jumlah)
values (999, 101, 99, 'hutang', '2020-03-28', 1000000000);
Query OK, 1 row affected (0.043 sec)

MariaDB [perbankan]>
```

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

+-----+-----+-----+-----+-----+-----+-----+
| 47 | 107 | 17 | kredit | 2020-01-17 00:00:00 | 700000 |
| 48 | 108 | 18 | kredit | 2020-01-18 00:00:00 | 800000 |
| 49 | 109 | 19 | kredit | 2020-01-19 00:00:00 | 900000 |
| 50 | 110 | 20 | kredit | 2020-01-20 00:00:00 | 1000000 |
| 999 | 101 | 99 | hutang | 2020-03-28 00:00:00 | 1000000000 |
+-----+-----+-----+-----+-----+-----+-----+
51 rows in set (0.000 sec)

MariaDB [perbankan]>
```

Update

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

+-----+-----+-----+-----+-----+-----+
|      49 |      109 |      19 | kredit | 2020-01-19 00:00:00 |      900000 |
|      50 |      110 |      20 | kredit | 2020-01-20 00:00:00 |     1000000 |
|      999 |      101 |      99 | hutang | 2020-03-28 00:00:00 |    1000000000 |
+-----+-----+-----+-----+-----+-----+
51 rows in set (0.000 sec)

MariaDB [perbankan]> update transaksi set jumlah=99999999 where no_transaksi=999;
Query OK, 1 row affected (0.037 sec)
Rows matched: 1  Changed: 1  Warnings: 0

MariaDB [perbankan]> select * from transaksi;
```

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

+-----+-----+-----+-----+-----+-----+
|      50 |      110 |      20 | kredit | 2020-01-20 00:00:00 |     1000000 |
|      999 |      101 |      99 | hutang | 2020-03-28 00:00:00 |    999999999 |
+-----+-----+-----+-----+-----+-----+
51 rows in set (0.000 sec)

MariaDB [perbankan]>
```

Delete

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

+-----+-----+-----+-----+-----+-----+
|      50 |      110 |      20 | kredit | 2020-01-20 00:00:00 |     1000000 |
|      999 |      101 |      99 | hutang | 2020-03-28 00:00:00 |    999999999 |
+-----+-----+-----+-----+-----+-----+
51 rows in set (0.000 sec)

MariaDB [perbankan]> delete from transaksi where no_transaksi=999;
Query OK, 1 row affected (0.034 sec)

MariaDB [perbankan]>
```

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

+-----+-----+-----+-----+-----+-----+
|      43 |      103 |      13 | kredit | 2020-01-13 00:00:00 |      300000 |
|      44 |      103 |      14 | kredit | 2020-01-14 00:00:00 |      400000 |
|      45 |      105 |      15 | kredit | 2020-01-15 00:00:00 |      500000 |
|      46 |      106 |      16 | kredit | 2020-01-16 00:00:00 |      600000 |
|      47 |      107 |      17 | kredit | 2020-01-17 00:00:00 |      700000 |
|      48 |      108 |      18 | kredit | 2020-01-18 00:00:00 |      800000 |
|      49 |      109 |      19 | kredit | 2020-01-19 00:00:00 |      900000 |
|      50 |      110 |      20 | kredit | 2020-01-20 00:00:00 |     1000000 |
+-----+-----+-----+-----+-----+-----+
50 rows in set (0.000 sec)

MariaDB [perbankan]>
```