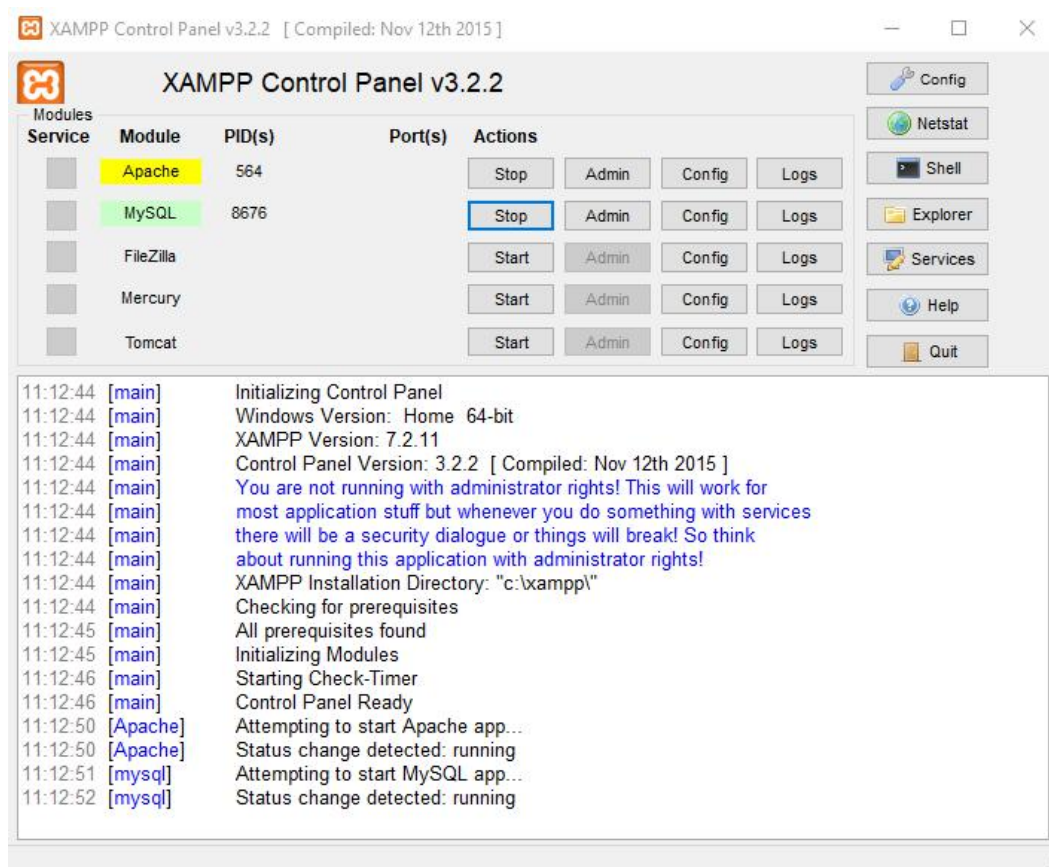


Nama : Ayudhia Isnafiani Fanada
NIM : L200180095
Kelas : D

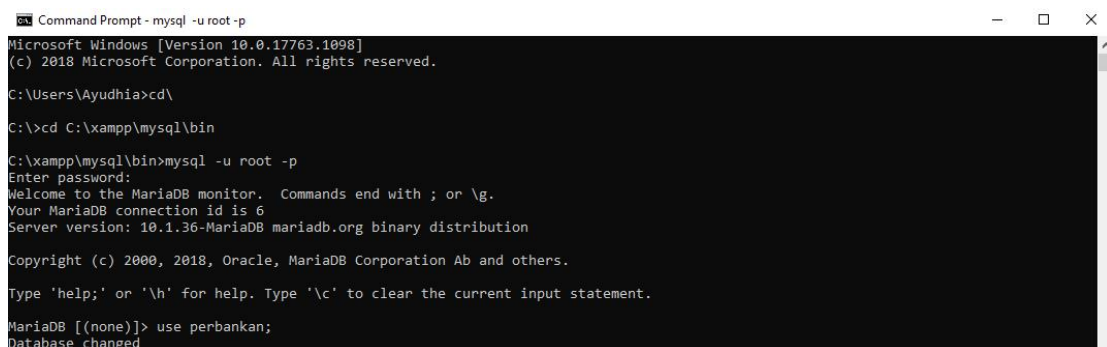
PRAKTIKUM SISTEM BASIS DATA MODUL 5

D. Langkah-langkah Praktikum

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



2. Buka Command Prompt dan login sebagai root ke MySQL. Kemudian pilih database perbankan.



3. Kemudian masukkan data-data berikut ke dalam database perbankan.

Tabel : nasabah

```
MariaDB [(none)]> use perbankan;
Database changed
MariaDB [perbankan]> INSERT INTO nasabah(id_nasabah, nama_nasabah, alamat_nasabah) VALUES(1, 'Sutopo', 'Jl. Jendral Sudirman 12');
Query OK, 1 row affected (0.09 sec)

MariaDB [perbankan]> INSERT INTO nasabah(id_nasabah, nama_nasabah, alamat_nasabah) VALUES(2, 'Maryati', 'Jl. MT. Haryono 31');
Query OK, 1 row affected (0.08 sec)

MariaDB [perbankan]> INSERT INTO nasabah(id_nasabah, nama_nasabah, alamat_nasabah) VALUES(3, 'Suparman', 'Jl. Hasanudin 81');
Query OK, 1 row affected (0.03 sec)

MariaDB [perbankan]> INSERT INTO nasabah(id_nasabah, nama_nasabah, alamat_nasabah) VALUES(4, 'Kartika Padmasari', 'Jl. Manggis 15');
Query OK, 1 row affected (0.07 sec)

MariaDB [perbankan]> INSERT INTO nasabah(id_nasabah, nama_nasabah, alamat_nasabah) VALUES(5, 'Budi Eko Prayogo', 'Jl. Kantil 30');
Query OK, 1 row affected (0.07 sec)

MariaDB [perbankan]> INSERT INTO nasabah(id_nasabah, nama_nasabah, alamat_nasabah) VALUES(6, 'Satria Eka Jaya', 'Jl. Slamet Riyadi 45');
Query OK, 1 row affected (0.07 sec)

MariaDB [perbankan]> INSERT INTO nasabah(id_nasabah, nama_nasabah, alamat_nasabah) VALUES(7, 'Indri Hapsari', 'Jl. Sutoyo 5');
Query OK, 1 row affected (0.07 sec)
```

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

MariaDB [perbankan]> INSERT INTO nasabah(id_nasabah, nama_nasabah, alamat_nasabah) VALUES(8, 'Sari Murti', 'Jl. Pangdaran 11');
Query OK, 1 row affected (0.07 sec)

MariaDB [perbankan]> INSERT INTO nasabah(id_nasabah, nama_nasabah, alamat_nasabah) VALUES(9, 'Canka Lokananta', 'Jl. Tidar 86');
Query OK, 1 row affected (0.04 sec)

MariaDB [perbankan]> INSERT INTO nasabah(id_nasabah, nama_nasabah, alamat_nasabah) VALUES(10, 'Budi Murtono', 'Jl. Merak 22');
Query OK, 1 row affected (0.06 sec)

MariaDB [perbankan]> select *from nasabah;
+-----+-----+-----+
| id_nasabah | nama_nasabah | alamat_nasabah |
+-----+-----+-----+
| 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. Pangdaran 11 |
| 9 | Canka Lokananta | Jl. Tidar 86 |
| 10 | Budi Murtono | Jl. Merak 22 |
+-----+-----+-----+
10 rows in set (0.00 sec)
```

Tabel : cabang_bank

```
Command Prompt - 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');
Query OK, 1 row affected (0.07 sec)

MariaDB [perbankan]> INSERT INTO cabang_bank(kode_cabang, nama_cabang, alamat_cabang) VALUES('BRUM', 'Bank Rut Unit Magelang', 'Jl. P. Tendea 63');
Query OK, 1 row affected (0.06 sec)

MariaDB [perbankan]> INSERT INTO cabang_bank(kode_cabang, nama_cabang, alamat_cabang) VALUES('BRUB', 'Bank Rut Unit Boyolali', 'Jl. Ahmad Yani 45');
Query OK, 1 row affected (0.06 sec)

MariaDB [perbankan]> INSERT INTO cabang_bank(kode_cabang, nama_cabang, alamat_cabang) VALUES('BRUK', 'Bank Rut Unit Klaten', 'Jl. Suparman 23');
Query OK, 1 row affected (0.07 sec)

MariaDB [perbankan]> INSERT INTO cabang_bank(kode_cabang, nama_cabang, alamat_cabang) VALUES('BRUY', 'Bank Rut Unit Yogyakarta', 'Jl. Anggrek 21');
Query OK, 1 row affected (0.12 sec)

MariaDB [perbankan]> INSERT INTO cabang_bank(kode_cabang, nama_cabang, alamat_cabang) VALUES('BRUW', 'Bank Rut Unit Wonogiri', 'Jl. Untung Suropati 12');
Query OK, 1 row affected (0.05 sec)

MariaDB [perbankan]> select *from cabang_bank;
+-----+-----+-----+
| kode_cabang | nama_cabang | alamat_cabang |
+-----+-----+-----+
| BRUB | Bank Rut Unit Boyolali | Jl. Ahmad Yani 45 |
| BRUK | Bank Rut Unit Klaten | Jl. Suparman 23 |
| BRUM | Bank Rut Unit Magelang | Jl. P. Tendea 63 |
| BRUS | Bank Rut Unit Surakarta | Jl. Slamet Riyadi 18 |
| BRUW | Bank Rut Unit Wonogiri | Jl. Untung Suropati 12 |
| BRUY | Bank Rut Unit Yogyakarta | Jl. Anggrek 21 |
+-----+-----+-----+
6 rows in set (0.00 sec)
```

Tabel : rekening

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

MariaDB [perbankan]> INSERT INTO rekening(no_rekening, kode_cabangFK, pin, saldo) VALUES(101, 'BRUS', '1111', 500000);
Query OK, 1 row affected (0.04 sec)

MariaDB [perbankan]> INSERT INTO rekening(no_rekening, kode_cabangFK, pin, saldo) VALUES(102, 'BRUS', '2222', 350000);
Query OK, 1 row affected (0.07 sec)

MariaDB [perbankan]> INSERT INTO rekening(no_rekening, kode_cabangFK, pin, saldo) VALUES(103, 'BRUS', '3333', 750000);
Query OK, 1 row affected (0.06 sec)

MariaDB [perbankan]> INSERT INTO rekening(no_rekening, kode_cabangFK, pin, saldo) VALUES(104, 'BRUM', '4444', 900000);
Query OK, 1 row affected (0.07 sec)

MariaDB [perbankan]> INSERT INTO rekening(no_rekening, kode_cabangFK, pin, saldo) VALUES(105, 'BRUM', '5555', 2000000);
Query OK, 1 row affected (0.07 sec)

MariaDB [perbankan]> INSERT INTO rekening(no_rekening, kode_cabangFK, pin, saldo) VALUES(106, 'BRUS', '6666', 3000000);
Query OK, 1 row affected (0.05 sec)

MariaDB [perbankan]> INSERT INTO rekening(no_rekening, kode_cabangFK, pin, saldo) VALUES(107, 'BRUS', '7777', 1000000);
Query OK, 1 row affected (0.06 sec)

MariaDB [perbankan]> INSERT INTO rekening(no_rekening, kode_cabangFK, pin, saldo) VALUES(108, 'BRUB', '0000', 5000000);
Query OK, 1 row affected (0.06 sec)

MariaDB [perbankan]> INSERT INTO rekening(no_rekening, kode_cabangFK, pin, saldo) VALUES(109, 'BRUB', '9999', 0);
Query OK, 1 row affected (0.04 sec)

MariaDB [perbankan]> INSERT INTO rekening(no_rekening, kode_cabangFK, pin, saldo) VALUES(110, 'BRUY', '1234', 550000);
Query OK, 1 row affected (0.07 sec)

MariaDB [perbankan]> INSERT INTO rekening(no_rekening, kode_cabangFK, pin, saldo) VALUES(111, 'BRUK', '4321', 150000);
Query OK, 1 row affected (0.06 sec)

MariaDB [perbankan]> INSERT INTO rekening(no_rekening, kode_cabangFK, pin, saldo) VALUES(112, 'BRUK', '0123', 300000);
Query OK, 1 row affected (0.06 sec)

MariaDB [perbankan]> INSERT INTO rekening(no_rekening, kode_cabangFK, pin, saldo) VALUES(113, 'BRUY', '8888', 255000);
Query OK, 1 row affected (0.05 sec)
```

```
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 |
+-----+-----+-----+-----+

13 rows in set (0.00 sec)
```


Tabel : nasabah_has_rekening

```
Command Prompt - mysql -u root -p
MariaDB [perbankan]> INSERT INTO nasabah_has_rekening(id_nasabahFK, no_rekeningFK) VALUES(1, 104);
Query OK, 1 row affected (0.08 sec)

MariaDB [perbankan]> INSERT INTO nasabah_has_rekening(id_nasabahFK, no_rekeningFK) VALUES(2, 103);
Query OK, 1 row affected (0.08 sec)

MariaDB [perbankan]> INSERT INTO nasabah_has_rekening(id_nasabahFK, no_rekeningFK) VALUES(3, 105);
Query OK, 1 row affected (0.05 sec)

MariaDB [perbankan]> INSERT INTO nasabah_has_rekening(id_nasabahFK, no_rekeningFK) VALUES(3, 106);
Query OK, 1 row affected (0.11 sec)

MariaDB [perbankan]> INSERT INTO nasabah_has_rekening(id_nasabahFK, no_rekeningFK) VALUES(4, 101);
Query OK, 1 row affected (0.09 sec)

MariaDB [perbankan]> INSERT INTO nasabah_has_rekening(id_nasabahFK, no_rekeningFK) VALUES(4, 107);
Query OK, 1 row affected (0.05 sec)

MariaDB [perbankan]> INSERT INTO nasabah_has_rekening(id_nasabahFK, no_rekeningFK) VALUES(5, 102);
Query OK, 1 row affected (0.05 sec)

MariaDB [perbankan]> INSERT INTO nasabah_has_rekening(id_nasabahFK, no_rekeningFK) VALUES(5, 107);
Query OK, 1 row affected (0.03 sec)

MariaDB [perbankan]> INSERT INTO nasabah_has_rekening(id_nasabahFK, no_rekeningFK) VALUES(6, 109);
Query OK, 1 row affected (0.06 sec)

MariaDB [perbankan]> INSERT INTO nasabah_has_rekening(id_nasabahFK, no_rekeningFK) VALUES(7, 109);
Query OK, 1 row affected (0.03 sec)

MariaDB [perbankan]> INSERT INTO nasabah_has_rekening(id_nasabahFK, no_rekeningFK) VALUES(8, 111);
Query OK, 1 row affected (0.05 sec)

MariaDB [perbankan]> INSERT INTO nasabah_has_rekening(id_nasabahFK, no_rekeningFK) VALUES(9, 110);
Query OK, 1 row affected (0.05 sec)

MariaDB [perbankan]> INSERT INTO nasabah_has_rekening(id_nasabahFK, no_rekeningFK) VALUES(10, 113);
Query OK, 1 row affected (0.03 sec)

MariaDB [perbankan]> INSERT INTO nasabah_has_rekening(id_nasabahFK, no_rekeningFK) VALUES(8, 112);
Query OK, 1 row affected (0.05 sec)
```

```
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 |
+-----+-----+
```

Tabel : transaksi

```
Command Prompt - 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);
Query OK, 1 row affected (0.06 sec)

MariaDB [perbankan]> INSERT INTO transaksi(no_transaksi, no_rekeningFK, id_nasabahFK, jenis_transaksi, tanggal, jumlah)
VALUES(2, 103, 2, 'debit', '2009-11-10', 40000);
Query OK, 1 row affected (0.10 sec)

MariaDB [perbankan]> INSERT INTO transaksi(no_transaksi, no_rekeningFK, id_nasabahFK, jenis_transaksi, tanggal, jumlah)
VALUES(3, 101, 4, 'kredit', '2009-11-12', 20000);
Query OK, 1 row affected (0.07 sec)

MariaDB [perbankan]> INSERT INTO transaksi(no_transaksi, no_rekeningFK, id_nasabahFK, jenis_transaksi, tanggal, jumlah)
VALUES(4, 106, 3, 'debit', '2009-11-13', 50000);
Query OK, 1 row affected (0.07 sec)

MariaDB [perbankan]> INSERT INTO transaksi(no_transaksi, no_rekeningFK, id_nasabahFK, jenis_transaksi, tanggal, jumlah)
VALUES(5, 107, 5, 'kredit', '2009-11-13', 30000);
Query OK, 1 row affected (0.07 sec)

MariaDB [perbankan]> INSERT INTO transaksi(no_transaksi, no_rekeningFK, id_nasabahFK, jenis_transaksi, tanggal, jumlah)
VALUES(6, 104, 1, 'kredit', '2009-11-15', 200000);
Query OK, 1 row affected (0.05 sec)

MariaDB [perbankan]> INSERT INTO transaksi(no_transaksi, no_rekeningFK, id_nasabahFK, jenis_transaksi, tanggal, jumlah)
VALUES(7, 110, 9, 'kredit', '2009-11-15', 150000);
Query OK, 1 row affected (0.07 sec)

MariaDB [perbankan]> INSERT INTO transaksi(no_transaksi, no_rekeningFK, id_nasabahFK, jenis_transaksi, tanggal, jumlah)
VALUES(8, 102, 5, 'debit', '2009-11-16', 20000);
Query OK, 1 row affected (0.07 sec)

MariaDB [perbankan]> INSERT INTO transaksi(no_transaksi, no_rekeningFK, id_nasabahFK, jenis_transaksi, tanggal, jumlah)
VALUES(9, 105, 3, 'kredit', '2009-11-18', 50000);
Query OK, 1 row affected (0.06 sec)

MariaDB [perbankan]> INSERT INTO transaksi(no_transaksi, no_rekeningFK, id_nasabahFK, jenis_transaksi, tanggal, jumlah)
VALUES(10, 107, 4, 'debit', '2009-11-19', 100000);
Query OK, 1 row affected (0.05 sec)

MariaDB [perbankan]> INSERT INTO transaksi(no_transaksi, no_rekeningFK, id_nasabahFK, jenis_transaksi, tanggal, jumlah)
VALUES(11, 103, 2, 'debit', '2009-11-19', 100000);
```

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

MariaDB [perbankan]> INSERT INTO transaksi(no_transaksi, no_rekeningFK, id_nasabahFK, jenis_transaksi, tanggal, jumlah)
VALUES(12, 104, 1, 'debit', '2009-11-19', 50000);
Query OK, 1 row affected (0.10 sec)

MariaDB [perbankan]> INSERT INTO transaksi(no_transaksi, no_rekeningFK, id_nasabahFK, jenis_transaksi, tanggal, jumlah)
VALUES(13, 107, 4, 'kredit', '2009-11-20', 200000);
Query OK, 1 row affected (0.07 sec)

MariaDB [perbankan]> INSERT INTO transaksi(no_transaksi, no_rekeningFK, id_nasabahFK, jenis_transaksi, tanggal, jumlah)
VALUES(14, 105, 3, 'debit', '2009-11-21', 40000);
Query OK, 1 row affected (0.10 sec)

MariaDB [perbankan]> INSERT INTO transaksi(no_transaksi, no_rekeningFK, id_nasabahFK, jenis_transaksi, tanggal, jumlah)
VALUES(15, 104, 1, 'kredit', '2009-11-22', 100000);
Query OK, 1 row affected (0.08 sec)

MariaDB [perbankan]> INSERT INTO transaksi(no_transaksi, no_rekeningFK, id_nasabahFK, jenis_transaksi, tanggal, jumlah)
VALUES(16, 101, 4, 'kredit', '2009-11-22', 20000);
Query OK, 1 row affected (0.06 sec)

MariaDB [perbankan]> INSERT INTO transaksi(no_transaksi, no_rekeningFK, id_nasabahFK, jenis_transaksi, tanggal, jumlah)
VALUES(17, 103, 2, 'debit', '2009-11-22', 50000);
Query OK, 1 row affected (0.09 sec)

MariaDB [perbankan]> INSERT INTO transaksi(no_transaksi, no_rekeningFK, id_nasabahFK, jenis_transaksi, tanggal, jumlah)
VALUES(18, 102, 5, 'debit', '2009-11-25', 50000);
Query OK, 1 row affected (0.04 sec)

MariaDB [perbankan]> INSERT INTO transaksi(no_transaksi, no_rekeningFK, id_nasabahFK, jenis_transaksi, tanggal, jumlah)
VALUES(19, 108, 10, 'debit', '2009-11-26', 100000);
Query OK, 1 row affected (0.10 sec)

MariaDB [perbankan]> INSERT INTO transaksi(no_transaksi, no_rekeningFK, id_nasabahFK, jenis_transaksi, tanggal, jumlah)
VALUES(20, 106, 3, 'kredit', '2009-11-27', 50000);
Query OK, 1 row affected (0.06 sec)

MariaDB [perbankan]> INSERT INTO transaksi(no_transaksi, no_rekeningFK, id_nasabahFK, jenis_transaksi, tanggal, jumlah)
VALUES(21, 103, 2, 'kredit', '2009-11-28', 200000);
Query OK, 1 row affected (0.05 sec)

MariaDB [perbankan]> INSERT INTO transaksi(no_transaksi, no_rekeningFK, id_nasabahFK, jenis_transaksi, tanggal, jumlah)
VALUES(22, 105, 3, 'kredit', '2009-11-28', 100000);
```



```

Command Prompt - mysql -u root -p

MariaDB [perbankan]> INSERT INTO transaksi(no_transaksi, no_rekeningFK, id_nasabahFK, jenis_transaksi, tanggal, jumlah)
VALUES(23, 102, 5, 'debit', '2009-11-30', 20000);
Query OK, 1 row affected (0.06 sec)

MariaDB [perbankan]> INSERT INTO transaksi(no_transaksi, no_rekeningFK, id_nasabahFK, jenis_transaksi, tanggal, jumlah)
VALUES(24, 104, 1, 'debit', '2009-12-1', 50000);
Query OK, 1 row affected (0.07 sec)

MariaDB [perbankan]> INSERT INTO transaksi(no_transaksi, no_rekeningFK, id_nasabahFK, jenis_transaksi, tanggal, jumlah)
VALUES(25, 103, 2, 'debit', '2009-12-2', 40000);
Query OK, 1 row affected (0.06 sec)

MariaDB [perbankan]> INSERT INTO transaksi(no_transaksi, no_rekeningFK, id_nasabahFK, jenis_transaksi, tanggal, jumlah)
VALUES(26, 101, 4, 'debit', '2009-12-4', 50000);
Query OK, 1 row affected (0.05 sec)

MariaDB [perbankan]> INSERT INTO transaksi(no_transaksi, no_rekeningFK, id_nasabahFK, jenis_transaksi, tanggal, jumlah)
VALUES(27, 103, 2, 'kredit', '2009-12-5', 100000);
Query OK, 1 row affected (0.07 sec)

MariaDB [perbankan]> INSERT INTO transaksi(no_transaksi, no_rekeningFK, id_nasabahFK, jenis_transaksi, tanggal, jumlah)
VALUES(28, 102, 5, 'kredit', '2009-12-5', 200000);
Query OK, 1 row affected (0.06 sec)

MariaDB [perbankan]> INSERT INTO transaksi(no_transaksi, no_rekeningFK, id_nasabahFK, jenis_transaksi, tanggal, jumlah)
VALUES(29, 109, 7, 'debit', '2009-12-5', 100000);
Query OK, 1 row affected (0.13 sec)

MariaDB [perbankan]> INSERT INTO transaksi(no_transaksi, no_rekeningFK, id_nasabahFK, jenis_transaksi, tanggal, jumlah)
VALUES(30, 110, 9, 'debit', '2009-12-6', 20000);
Query OK, 1 row affected (0.04 sec)

```

```

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  |
+-----+-----+-----+-----+-----+-----+
30 rows in set (0.00 sec)

```

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

```
Command Prompt - 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 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          | Canka Lokananta | Jl. Tidar 86            |
| 10         | Budi Murtono   | Jl. Merak 22            |
+-----+-----+-----+
10 rows in set (0.03 sec)

MariaDB [perbankan]> UPDATE nasabah
-> SET alamat_nasabah = 'Jalan Slamet Riyadi No.34'
-> WHERE nama_nasabah = 'Indri Hapsari';
Query OK, 1 row affected (0.13 sec)
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 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  | Jalan Slamet Riyadi No.34 |
| 8          | Sari Murti     | Jl. Pangandaran 11      |
| 9          | Canka Lokananta | Jl. Tidar 86            |
| 10         | Budi Murtono   | Jl. Merak 22            |
+-----+-----+-----+
10 rows in set (0.00 sec)
```

- Cabang dengan kode “BRUW pindah ke alamat “Jalan A. Yani No.23”

```
Command Prompt - 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 Rut 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. Untung Suropati 12 |
| BRUY        | Bank Rut Unit Yogyakarta | Jl. Anggrek 21    |
+-----+-----+-----+
6 rows in set (0.03 sec)

MariaDB [perbankan]> UPDATE cabang_bank
-> SET alamat_cabang = 'Jalan A. Yani No.23'
-> WHERE kode_cabang = 'BRUW';
Query OK, 1 row affected (0.06 sec)
Rows matched: 1 Changed: 1 Warnings: 0

MariaDB [perbankan]> select *from cabang_bank;
+-----+-----+-----+
| kode_cabang | nama_cabang | alamat_cabang |
+-----+-----+-----+
| BRUB        | Bank Rut Unit Boyolali | Jl. Ahmad Yani 45 |
| BRUK        | Bank Rut 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  | Jalan A. Yani No.23 |
| BRUY        | Bank Rut Unit Yogyakarta | Jl. Anggrek 21    |
+-----+-----+-----+
6 rows in set (0.00 sec)
```

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

```
Command Prompt - 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 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 | Jalan Slamet Riyadi No.34 |
| 8 | Sari Murti | Jl. Pangandaran 11 |
| 9 | Canka Lokananta | Jl. Tidar 86 |
| 10 | Budi Murtono | Jl. Merak 22 |
+-----+-----+-----+
10 rows in set (0.00 sec)

MariaDB [perbankan]> DELETE FROM nasabah WHERE id_nasabah = 7;
Query OK, 1 row affected (0.07 sec)

MariaDB [perbankan]> select *from nasabah;
+-----+-----+-----+
| id_nasabah | nama_nasabah | alamat_nasabah |
+-----+-----+-----+
| 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 |
| 8 | Sari Murti | Jl. Pangandaran 11 |
| 9 | Canka Lokananta | Jl. Tidar 86 |
| 10 | Budi Murtono | Jl. Merak 22 |
+-----+-----+-----+
9 rows in set (0.00 sec)
```

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

```
Command Prompt - 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 Rut 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 | Jalan A. Yani No.23 |
| BRUY | Bank Rut Unit Yogyakarta | Jl. Anggrek 21 |
+-----+-----+-----+
6 rows in set (0.00 sec)

MariaDB [perbankan]> DELETE FROM cabang_bank WHERE nama_cabang = 'Bank Rut Unit Magelang';
Query OK, 1 row affected (0.00 sec)

MariaDB [perbankan]> select *from cabang_bank;
+-----+-----+-----+
| kode_cabang | nama_cabang | alamat_cabang |
+-----+-----+-----+
| BRUB | Bank Rut Unit Boyolali | Jl. Ahmad Yani 45 |
| BRUK | Bank Rut Unit Klaten | Jl. Suparman 23 |
| BRUS | Bank Rut Unit Surakarta | Jl. Slamet Riyadi 18 |
| BRUW | Bank Rut Unit Wonogiri | Jalan A. Yani No.23 |
| BRUY | Bank Rut Unit Yogyakarta | Jl. Anggrek 21 |
+-----+-----+-----+
5 rows in set (0.00 sec)
```


E. Tugas

Masukkan beberapa record ke setiap tabel dalam database yang telah anda buat pada modul 4. Print out hasil implementasi rancangan tersebut rancangan tersebut dan anda analisa hasilnya. (masing-masing 10 record untuk tabel master dan 20 record untuk tabel transaksi).

Tabel : nasabah

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

MariaDB [perbankan]> INSERT INTO nasabah(id_nasabah, nama_nasabah, alamat_nasabah) VALUES
-> (11, 'Ayudhia Isnafiani', 'Jl. Gatot Subroto 13'),
-> (12, 'Fanada Luchiza', 'Jl. Gatsoe 18'),
-> (13, 'Wulandari Ratna', 'Kartasura'),
-> (14, 'Nadya Ayu', 'Pangkalanbuun'),
-> (15, 'Berlian Vidia', 'Pati'),
-> (16, 'Chandika A', 'Bekasi'),
-> (17, 'Elsa Putri', 'Mojolaban'),
-> (18, 'Rohmad K', 'Riau'),
-> (19, 'Abid M', 'Wonogiri'),
-> (20, 'Diah F', 'Sorong');
Query OK, 10 rows affected (0.05 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 | Maryati | Jl. MT. Haryono 31 |
| 3 | Superman | 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 86 |
| 10 | Budi Murtono | Jl. Merak 22 |
| 11 | Ayudhia Isnafiani | Jl. Gatot Subroto 13 |
| 12 | Fanada Luchiza | Jl. Gatsoe 18 |
| 13 | Wulandari Ratna | Kartasura |
| 14 | Nadya Ayu | Pangkalanbuun |
| 15 | Berlian Vidia | Pati |
| 16 | Chandika A | Bekasi |
| 17 | Elsa Putri | Mojolaban |
| 18 | Rohmad K | Riau |
| 19 | Abid M | Wonogiri |
| 20 | Diah F | Sorong |
+-----+-----+-----+
19 rows in set (0.00 sec)
```

Tabel : cabang_bank

```
Command Prompt - mysql -u root -p
MariaDB [perbankan]> INSERT INTO cabang_bank(kode_cabang, nama_cabang, alamat_cabang) VALUES
-> ('BRUJ', 'Bank Rut Unit Jakarta', 'Jl. Soekarno 96'),
-> ('BRUD', 'Bank Rut Unit Denpasar', 'Jl. Moh Hatta 11'),
-> ('BRUT', 'Bank Rut Unit Tangerang', 'Jl. Moh Yamin 2'),
-> ('BRUC', 'Bank Rut Unit Cilegon', 'Jl. Slamet Riyadi 89'),
-> ('BRUG', 'Bank Rut Unit Gorontalo', 'Jl. Soeharto 1'),
-> ('BRUP', 'Bank Rut Unit Pekalongan', 'Jl. Soecipto 7'),
-> ('BRUA', 'Bank Rut Unit Ambon', 'Jl. Dahlia 7'),
-> ('BRUL', 'Bank Rut Unit Lubuklinggau', 'Jl. Indah 34'),
-> ('BRUN', 'Bank Rut Unit Nganjuk', 'Jl. Berseri 54'),
-> ('BRUI', 'Bank Rut Unit Indramayu', 'Jl. Anggrek 61');
Query OK, 10 rows affected (0.09 sec)
Records: 10 Duplicates: 0 Warnings: 0

MariaDB [perbankan]> select *from cabang_bank;
+-----+-----+-----+
| kode_cabang | nama_cabang | alamat_cabang |
+-----+-----+-----+
| BRUA       | Bank Rut Unit Ambon | Jl. Dahlia 7 |
| BRUB       | Bank Rut Unit Boyolali | Jl. Ahmad Yani 45 |
| BRUC       | Bank Rut Unit Cilegon | Jl. Slamet Riyadi 89 |
| BRUD       | Bank Rut Unit Denpasar | Jl. Moh Hatta 11 |
| BRUG       | Bank Rut Unit Gorontalo | Jl. Soeharto 1 |
| BRUI       | Bank Rut Unit Indramayu | Jl. Anggrek 61 |
| BRUJ       | Bank Rut Unit Jakarta | Jl. Soekarno 96 |
| BRUK       | Bank Rut Unit Klaten | Jl. Superman 23 |
| BRUL       | Bank Rut Unit Lubuklinggau | Jl. Indah 34 |
| BRUN       | Bank Rut Unit Nganjuk | Jl. Berseri 54 |
| BRUP       | Bank Rut Unit Pekalongan | Jl. Soecipto 7 |
| BRUS       | Bank Rut Unit Surakarta | Jl. Slamet Riyadi 18 |
| BRUT       | Bank Rut Unit Tangerang | Jl. Moh Yamin 2 |
| BRUW       | Bank Rut Unit Wonogiri | Jalan A. Yani No.23 |
| BRUY       | Bank Rut Unit Yogyakarta | Jl. Anggrek 21 |
+-----+-----+-----+
15 rows in set (0.00 sec)
```

Tabel : rekening

```
Command Prompt - mysql -u root -p
MariaDB [perbankan]> INSERT INTO rekening(no_rekening, kode_cabangFK, pin, saldo) VALUES
-> (114, 'BRUJ', 5678, 9000000),
-> (115, 'BRUD', 1100, 7000000),
-> (116, 'BRUT', 6116, 5000000),
-> (117, 'BRUC', 9669, 4000000),
-> (118, 'BRUG', 1001, 5500000),
-> (119, 'BRUP', 2002, 7500000),
-> (120, 'BRUA', 1991, 8000000),
-> (121, 'BRUL', 9876, 6000000),
-> (122, 'BRUN', 6006, 6500000),
-> (123, 'BRUI', 6543, 3500000);
Query OK, 10 rows affected (0.11 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 | 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 | BRUJ | 5678 | 9000000 |
| 115 | BRUD | 1100 | 7000000 |
| 116 | BRUT | 6116 | 5000000 |
| 117 | BRUC | 9669 | 4000000 |
| 118 | BRUG | 1001 | 5500000 |
| 119 | BRUP | 2002 | 7500000 |
| 120 | BRUA | 1991 | 8000000 |
| 121 | BRUL | 9876 | 6000000 |
| 122 | BRUN | 6006 | 6500000 |
| 123 | BRUI | 6543 | 3500000 |
+-----+-----+-----+-----+
23 rows in set (0.00 sec)
```

Tabel : nasabah_has_rekening

```
MariaDB [perbankan]> INSERT INTO nasabah_has_rekening(id_nasabahFK, no_rekeningFK) VALUES
-> (11, 123),
-> (12, 122),
-> (13, 121),
-> (14, 120),
-> (15, 119),
-> (16, 118),
-> (17, 117),
-> (18, 116),
-> (19, 115),
-> (20, 114);
Query OK, 10 rows affected (0.08 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 | 123 |
| 12 | 122 |
| 13 | 121 |
| 14 | 120 |
| 15 | 119 |
| 16 | 118 |
| 17 | 117 |
| 18 | 116 |
| 19 | 115 |
| 20 | 114 |
+-----+-----+
25 rows in set (0.00 sec)
```

Tabel : transaksi

```
Command Prompt - mysql -u root -p
MariaDB [perbankan]> INSERT INTO transaksi(no_transaksi, no_rekeningFK, id_nasabahFK, jenis_transaksi,
tanggal, jumlah) VALUES
-> (31, 123, 11, 'debit', '2010-01-03', 700000),
-> (32, 123, 11, 'kredit', '2010-01-04', 800000),
-> (33, 122, 12, 'kredit', '2010-01-04', 500000),
-> (34, 121, 13, 'kredit', '2010-01-07', 500000),
-> (35, 119, 15, 'debit', '2010-01-07', 450000),
-> (36, 119, 15, 'kredit', '2010-01-08', 550000),
-> (37, 116, 18, 'kredit', '2010-01-12', 350000),
-> (38, 120, 14, 'debit', '2010-01-12', 750000),
-> (39, 121, 13, 'debit', '2010-01-16', 800000),
-> (40, 118, 16, 'debit', '2010-01-16', 100000),
-> (41, 118, 16, 'kredit', '2010-01-17', 300000),
-> (42, 118, 17, 'debit', '2010-01-17', 275000),
-> (43, 114, 20, 'kredit', '2010-01-20', 775000),
-> (44, 115, 19, 'kredit', '2010-01-20', 975000),
-> (45, 115, 19, 'debit', '2010-01-20', 555000),
-> (46, 116, 18, 'debit', '2010-01-22', 650000),
-> (47, 122, 12, 'debit', '2010-01-22', 500000),
-> (48, 120, 14, 'kredit', '2010-01-23', 300000),
-> (49, 117, 17, 'kredit', '2010-01-24', 350000),
-> (50, 114, 20, 'debit', '2010-01-24', 750000);
Query OK, 20 rows affected (0.18 sec)
Records: 20 Duplicates: 0 Warnings: 0
```


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	11	123	debit	2010-01-03 00:00:00	700000
32	11	123	kredit	2010-01-04 00:00:00	800000
33	12	122	kredit	2010-01-04 00:00:00	500000
34	13	121	kredit	2010-01-07 00:00:00	500000

34	13	121	kredit	2010-01-07 00:00:00	500000
35	15	119	debit	2010-01-07 00:00:00	450000
36	15	119	kredit	2010-01-08 00:00:00	550000
37	18	116	kredit	2010-01-12 00:00:00	350000
38	14	120	debit	2010-01-12 00:00:00	750000
39	13	121	debit	2010-01-16 00:00:00	800000
40	16	118	debit	2010-01-16 00:00:00	100000
41	16	118	kredit	2010-01-17 00:00:00	300000
42	17	118	debit	2010-01-17 00:00:00	275000
43	20	114	kredit	2010-01-20 00:00:00	775000
44	19	115	kredit	2010-01-20 00:00:00	975000
45	19	115	debit	2010-01-20 00:00:00	555000
46	18	116	debit	2010-01-22 00:00:00	650000
47	12	122	debit	2010-01-22 00:00:00	500000
48	14	120	kredit	2010-01-23 00:00:00	300000
49	17	117	kredit	2010-01-24 00:00:00	350000
50	20	114	debit	2010-01-24 00:00:00	750000

50 rows in set (0.03 sec)