

LAPORAN PRAKTIKUM
SISTEM BASIS DATA
MODUL 5
DATA MANIPULATION LANGUAGE (DML)

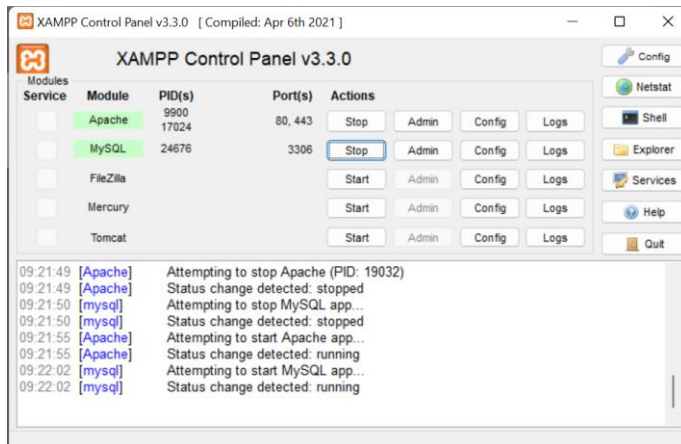


Disusun oleh:
Bima Triadmaja
L200210137
C

TEKNIK INFORMATIKA
FAKULTAS KOMUNIKASI DAN INFORMATIKA
UNIVERSITAS MUHAMMADIYAH SURAKARTA
2022/2023

D. Langkah-langkah praktikum

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



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

```
Command Prompt - mysql -u root -p
Microsoft Windows [Version 10.0.22000.1696]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Infinity>cd C:\xampp\mysql\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 8
Server version: 10.4.27-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.
```

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

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

5. Kemudian masukan data-data berikut ini ke dalam database perbankan.

Tabel : 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

TUGAS : Menambah 10 record pada tabel nasabah

```

MariaDB [(none)]> use perbankan;
Database changed
MariaDB [perbankan]> create table nasabah(
  -> id_nasabah integer primary key,
  -> nama_nasabah varchar(45) not null,
  -> alamat_nasabah varchar(255) not null
  -> );
Query OK, 0 rows affected (0.014 sec)

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, 'Canka Lokananta', 'Jl. Tidar 86'),
  -> (10, 'Budi Murtono', 'Jl. Merak 22'),
  -> (11, 'Bima Triadmaja', 'Jl. Palihan 13'),
  -> (12, 'Risma Nanda', 'Jl. Pedan 27'),
  -> (13, 'Alha Jantri', 'Jl. Keden 01'),
  -> (14, 'Aisah Hindhun', 'Jl. Ngerangan 20'),
  -> (15, 'Ade Cahyo', 'Jl. Plosowangi 76'),
  -> (16, 'Ganang Pras', 'Jl. Toprayan 07'),
  -> (17, 'Dhea Salsabella', 'Jl. Karangasem 17'),
  -> (18, 'Reyhan Pradhana', 'Jl. Kedungampel 12'),
  -> (19, 'Fatika Sari', 'Jl. Trucuk 35'),
  -> (20, 'Ilham Muchron', 'Jl. Tirtomarto 05');
Query OK, 20 rows affected (0.029 sec)
Records: 20 Duplicates: 0 Warnings: 0

```

Tabel : cabang_bank

kode_cabang	nama_cabang	alamat_cabang
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 Rut Unit Klaten	Jl. Suparman 23
BRUY	Bank Rut Unit Yogyakarta	Jl. Anggrek 21
BRUW	Bank Rut Unit Wonogiri	Jl. Untung Suropati 12

TUGAS : Menambah 10 record pada tabel cabang_bank

```

MariaDB [perbankan]> create table cabang_bank(
  -> kode_cabang varchar(20) primary key,
  -> nama_cabang varchar(45) unique not null,
  -> alamat_cabang varchar(255) not null
  -> );
Query OK, 0 rows affected (0.029 sec)

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 Rut Unit Klaten', 'Jl. Suparman 23'),
  -> ('BRUY', 'Bank Rut Unit Yogyakarta', 'Jl. Anggrek 21'),
  -> ('BRUW', 'Bank Rut Unit Wonogiri', 'Jl. Untung Suropati 12'),
  -> ('BRUBE', 'Bank Rut Unit Bendosari', 'Jl. Bendosari 40'),
  -> ('BRUBEK', 'Bank Rut Unit Bekonang', 'Jl. Bekonang 56'),
  -> ('BRUJ', 'Bank Rut Unit Jaten', 'Jl. Jaten 14'),
  -> ('BRUP', 'Bank Rut Unit Palur', 'Jl. Palur 25'),
  -> ('BRUPOL', 'Bank Rut Unit Polokarto', 'Jl. Godog 31'),
  -> ('BRUSUK', 'Bank Rut Unit Sukoharjo', 'Jl. Gayam 63'),
  -> ('BRUC', 'Bank Rut Unit Cawas', 'Jl. Barepan 10'),
  -> ('BRUT', 'Bank Rut Unit Trucuk', 'Jl. Gaden 15'),
  -> ('BRUBA', 'Bank Rut Unit Bayat', 'Jl. Temas 42'),
  -> ('BRUTA', 'Bank Rut Unit Tawang Sari', 'Jl. Tawang Sari 22');
Query OK, 16 rows affected (0.008 sec)
Records: 16 Duplicates: 0 Warnings: 0

```

Tabel : rekening

no_rekening	kode_cabang	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

TUGAS : Menambah 10 record pada tabel rekening

```

MariaDB [perbankan]> create table rekening(
  -> no_rekening integer primary key,
  -> kode_cabangFK varchar(20) references cabang_bank (kode_cabang) on delete cascade on update cascade,
  -> pin varchar (20) default '1234' not null,
  -> saldo integer default 0 not null);
Query OK, 0 rows affected (0.011 sec)

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),
  -> (114, 'BRUC', 1466, 700000),
  -> (115, 'BRUTA', 8122, 740000),
  -> (116, 'BRUBA', 1047, 650000),
  -> (117, 'BRUT', 1609, 420000),
  -> (118, 'BRUSUK', 9215, 800000),
  -> (119, 'BRUP', 5535, 680000),
  -> (120, 'BRUJ', 1354, 730000),
  -> (121, 'BRUBE', 1700, 900000),
  -> (122, 'BRUBEK', 9105, 250000),
  -> (123, 'BRUTA', 4195, 4500000);
Query OK, 23 rows affected (0.008 sec)
Records: 23 Duplicates: 0 Warnings: 0

```

Tabel : nasabah_has_rekening

id_nasabah	no_rekening
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

TUGAS : Menambah 10 record pada tabel nasabah_has_rekening

```

MariaDB [perbankan]> create table nasabah_has_rekening(
  -> id_nasabahFK integer references nasabah(id_nasabah) on delete cascade on update cascade,
  -> no_rekeningFK integer references rekening(no_rekening) on delete cascade on update cascade,
  -> primary key(id_nasabahFK, no_rekeningFK)
  -> );
Query OK, 0 rows affected (0.008 sec)

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),
  -> (11, 114),
  -> (13, 105),
  -> (13, 112),
  -> (14, 101),
  -> (15, 117),
  -> (16, 102),
  -> (16, 109),
  -> (17, 107),
  -> (19, 116),
  -> (20, 105);
Query OK, 25 rows affected (0.005 sec)
Records: 25  Duplicates: 0  Warnings: 0

```

Tabel : transaksi

no_ transaksi	no_ rekening	id_ nasabah	jenis_ transaksi	tanggal	jumlah
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

TUGAS : Menambah 20 record pada tabel transaksi

```

MariaDB [perbankan]> create table transaksi(
  -> no_transaksi serial primary key,
  -> no_rekeningFK integer references rekening(no_rekening) on delete cascade on update cascade,
  -> id_nasabahFK integer references nasabah(id_nasabah) on delete cascade 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 (0.013 sec)

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),
  -> (31, 103, 2, 'debit', '2009-12-6',50000),
  -> (32, 104, 1, 'debit', '2009-12-7',40000),
  -> (33, 107, 4, 'kredit', '2009-12-7',20000),
  -> (34, 105, 3, 'debit', '2009-12-7',50000),
  -> (35, 104, 1, 'kredit', '2009-12-9',30000),
  -> (36, 101, 4, 'kredit', '2009-12-10',200000),
  -> (37, 103, 2, 'debit', '2009-12-10',150000),
  -> (38, 109, 5, 'debit', '2009-12-11',20000),
  -> (39, 101, 10, 'debit', '2009-12-11',50000),
  -> (40, 112, 3, 'kredit', '2009-12-13',100000),
  -> (41, 103, 2, 'kredit', '2009-12-14',100000),
  -> (42, 105, 3, 'kredit', '2009-12-14',50000),
  -> (43, 102, 5, 'debit', '2009-12-15',200000),
  -> (44, 104, 7, 'debit', '2009-12-16',40000),
  -> (45, 103, 9, 'debit', '2009-12-17',100000),
  -> (46, 121, 3, 'debit', '2009-12-17',20000),
  -> (47, 133, 2, 'kredit', '2009-12-20',50000),
  -> (48, 142, 5, 'kredit', '2009-12-23',50000),
  -> (49, 109, 7, 'debit', '2009-12-23',100000),
  -> (50, 110, 9, 'debit', '2009-12-27',50000);
Query OK, 50 rows affected (0.008 sec)
Records: 50 Duplicates: 0 Warnings: 0

```

6. Lakukan update untuk kasus-kasus berikut ini.
 - a. Nasabah dengan nama “Indri Hapsari” pindah alamat ke “JalanSlamet Riyadi No.34”.
 - b. Cabang dengan kode “BRUW” pindah ke alamat “Jalan A. Yani No.23”.

```
MariaDB [perbankan]> UPDATE nasabah
-> set alamat_nasabah = 'Jl. Slamet Riyadi 34' where nama_nasabah = 'Indri Hapsari';
Query OK, 1 row affected (0.003 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	Jl. Slamet Riyadi 34
8	Sari Murti	Jl. Pangandaran 11
9	Canka Lokananta	Jl. Tidar 86
10	Budi Murtono	Jl. Merak 22
11	Bima Triadmaja	Jl. Palihan 13
12	Risma Nanda	Jl. Pedan 27
13	Alha Jantri	Jl. Keden 01
14	Aisah Hindhun	Jl. Ngerangan 20
15	Ade Cahyo	Jl. Plosowangi 76
16	Ganang Pras	Jl. Toprayan 07
17	Dhea Salsabella	Jl. Karangasem 17
18	Reyhan Pradhana	Jl. Kedungampel 12
19	Fatika Sari	Jl. Trucuk 35
20	Ilham Muchron	Jl. Tirtomarto 05

```
20 rows in set (0.001 sec)
```

```
MariaDB [perbankan]> UPDATE cabang_bank
-> set alamat_cabang = 'Jl. A. Yani 23' where kode_cabang = 'BRUW';
Query OK, 1 row affected (0.003 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
BRUBA	Bank Rut Unit Bayat	Jl. Temas 42
BRUBE	Bank Rut Unit Bendosari	Jl. Bendosari 40
BRUBEK	Bank Rut Unit Bekonang	Jl. Bekonang 56
BRUC	Bank Rut Unit Cawas	Jl. Barepan 10
BRUJ	Bank Rut Unit Jaten	Jl. Jaten 14
BRUK	Bank Rut Unit Klaten	Jl. Suparman 23
BRUM	Bank Rut Unit Magelang	Jl. P. Tendean 63
BRUP	Bank Rut Unit Palur	Jl. Palur 25
BRUPOL	Bank Rut Unit Polokarto	Jl. Godog 31
BRUS	Bank Rut Unit Surakarta	Jl. Slamet Riyadi 18
BRUSUK	Bank Rut Unit Sukoharjo	Jl. Gayam 63
BRUT	Bank Rut Unit Trucuk	Jl. Gaden 15
BRUTA	Bank Rut Unit Tawang Sari	Jl. Tawang Sari 22
BRUW	Bank Rut Unit Wonogiri	Jl. A. Yani 23
BRUY	Bank Rut Unit Yogyakarta	Jl. Anggrek 21

```
16 rows in set (0.000 sec)
```


7. Lakukan penghapusan untuk kasus-kasus berikut.
- Nasabah dengan id “7” menutup rekeningnya.
 - Cabang dengan nama_cabang “Bank Rut Unit Magelang” menutup kantornya.

```
MariaDB [perbankan]> DELETE FROM nasabah where id_nasabah = 7;  
Query OK, 1 row affected (0.004 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
11	Bima Triadmaja	Jl. Palihan 13
12	Risma Nanda	Jl. Pedan 27
13	Alha Jantri	Jl. Keden 01
14	Aisah Hindhun	Jl. Ngerangan 20
15	Ade Cahyo	Jl. Plosowangi 76
16	Ganang Pras	Jl. Toprayan 07
17	Dhea Salsabella	Jl. Karangasem 17
18	Reyhan Pradhana	Jl. Kedungampel 12
19	Fatika Sari	Jl. Trucuk 35
20	Ilham Muchron	Jl. Tirtomarto 05

```
19 rows in set (0.000 sec)
```

```
MariaDB [perbankan]> DELETE FROM cabang_bank where nama_cabang = 'Bank Rut Unit Magelang';  
Query OK, 1 row affected (0.006 sec)
```

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

kode_cabang	nama_cabang	alamat_cabang
BRUB	Bank Rut Unit Boyolali	Jl. Ahmad Yani 45
BRUBA	Bank Rut Unit Bayat	Jl. Temas 42
BRUBE	Bank Rut Unit Bendosari	Jl. Bendosari 40
BRUBEK	Bank Rut Unit Bekonang	Jl. Bekonang 56
BRUC	Bank Rut Unit Cawas	Jl. Barepan 10
BRUJ	Bank Rut Unit Jaten	Jl. Jaten 14
BRUK	Bank Rut Unit Klaten	Jl. Superman 23
BRUP	Bank Rut Unit Palur	Jl. Palur 25
BRUPOL	Bank Rut Unit Polokarto	Jl. Godog 31
BRUS	Bank Rut Unit Surakarta	Jl. Slamet Riyadi 18
BRUSUK	Bank Rut Unit Sukoharjo	Jl. Gayam 63
BRUT	Bank Rut Unit Trucuk	Jl. Gaden 15
BRUTA	Bank Rut Unit Tawang Sari	Jl. Tawang Sari 22
BRUW	Bank Rut Unit Wonogiri	Jl. A. Yani 23
BRUY	Bank Rut Unit Yogyakarta	Jl. Anggrek 21

```
15 rows in set (0.001 sec)
```

E. Tugas

Menambahkan 20 record ke tabel transaksi, dan 10 record untuk tabel yang lain (memakai database perbankan)

```
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
11	Bima Triadmaja	Jl. Palihan 13
12	Risma Nanda	Jl. Pedan 27
13	Alha Jantri	Jl. Keden 01
14	Aisah Hindhun	Jl. Ngerangan 20
15	Ade Cahyo	Jl. Plosowangi 76
16	Ganang Pras	Jl. Toprayan 07
17	Dhea Salsabella	Jl. Karangasem 17
18	Reyhan Pradhana	Jl. Kedungampel 12
19	Fatika Sari	Jl. Trucuk 35
20	Ilham Muchron	Jl. Tirtomarto 05

```
20 rows in set (0.001 sec)
```



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

kode_cabang	nama_cabang	alamat_cabang
BRUB	Bank Rut Unit Boyolali	Jl. Ahmad Yani 45
BRUBA	Bank Rut Unit Bayat	Jl. Temas 42
BRUBE	Bank Rut Unit Bendosari	Jl. Bendosari 40
BRUBEK	Bank Rut Unit Bekonang	Jl. Bekonang 56
BRUC	Bank Rut Unit Cawas	Jl. Barepan 10
BRUJ	Bank Rut Unit Jaten	Jl. Jaten 14
BRUK	Bank Rut Unit Klaten	Jl. Suparman 23
BRUM	Bank Rut Unit Magelang	Jl. P. Tendean 63
BRUP	Bank Rut Unit Palur	Jl. Palur 25
BRUPOL	Bank Rut Unit Polokarto	Jl. Godog 31
BRUS	Bank Rut Unit Surakarta	Jl. Slamet Riyadi 18
BRUSUK	Bank Rut Unit Sukoharjo	Jl. Gayam 63
BRUT	Bank Rut Unit Trucuk	Jl. Gaden 15
BRUTA	Bank Rut Unit Tawang Sari	Jl. Tawang Sari 22
BRUW	Bank Rut Unit Wonogiri	Jl. A. Yani 23
BRUY	Bank Rut Unit Yogyakarta	Jl. Anggrek 21

```
16 rows in set (0.001 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	0	5000000
109	BRUB	9999	0
110	BRUY	1234	550000
111	BRUK	4321	150000
112	BRUK	123	300000
113	BRUY	8888	255000
114	BRUC	1466	7000000
115	BRUTA	8122	740000
116	BRUBA	1047	650000
117	BRUT	1609	420000
118	BRUSUK	9215	800000
119	BRUP	5535	680000
120	BRUJ	1354	730000
121	BRUBE	1700	900000
122	BRUBEK	9105	250000
123	BRUTA	4195	4500000

```
23 rows in set (0.001 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
11	114
13	105
13	112
14	101
15	117
16	102
16	109
17	107
19	116
20	105

```
25 rows in set (0.000 sec)
```

MariaDB [perbankan]> select * from transaksi;

no_transaksi	no_rekeningFK	id_nasabahFK	jenis_transaksi	tanggal	jumlah
1	105	3	debit	2009-11-10 00:00:00	50000
2	103	2	debit	2009-11-10 00:00:00	40000
3	101	4	kredit	2009-11-12 00:00:00	20000
4	106	3	debit	2009-11-13 00:00:00	50000
5	107	5	kredit	2009-11-13 00:00:00	30000
6	104	1	kredit	2009-11-15 00:00:00	200000
7	110	9	kredit	2009-11-15 00:00:00	150000
8	102	5	debit	2009-11-16 00:00:00	20000
9	105	3	kredit	2009-11-18 00:00:00	50000
10	107	4	debit	2009-11-19 00:00:00	100000
11	103	2	debit	2009-11-19 00:00:00	100000
12	104	1	debit	2009-11-19 00:00:00	50000
13	107	4	kredit	2009-11-20 00:00:00	200000
14	105	3	debit	2009-11-21 00:00:00	40000
15	104	1	kredit	2009-11-22 00:00:00	100000
16	101	4	kredit	2009-11-22 00:00:00	20000
17	103	2	debit	2009-11-22 00:00:00	50000
18	102	5	debit	2009-11-25 00:00:00	50000
19	108	10	debit	2009-11-26 00:00:00	100000
20	106	3	kredit	2009-11-27 00:00:00	50000
21	103	2	kredit	2009-11-28 00:00:00	200000
22	105	3	kredit	2009-11-28 00:00:00	100000
23	102	5	debit	2009-11-30 00:00:00	20000
24	104	1	debit	2009-12-01 00:00:00	50000
25	103	2	debit	2009-12-02 00:00:00	40000
26	101	4	debit	2009-12-04 00:00:00	50000
27	103	2	kredit	2009-12-05 00:00:00	100000
28	102	5	kredit	2009-12-05 00:00:00	200000
29	109	7	debit	2009-12-05 00:00:00	100000
30	110	9	debit	2009-12-06 00:00:00	20000
31	103	2	debit	2009-12-06 00:00:00	50000
32	104	1	debit	2009-12-07 00:00:00	40000
33	107	4	kredit	2009-12-07 00:00:00	20000
34	105	3	debit	2009-12-07 00:00:00	50000
35	104	1	kredit	2009-12-09 00:00:00	30000
36	101	4	kredit	2009-12-10 00:00:00	200000
37	103	2	debit	2009-12-10 00:00:00	150000
38	109	5	debit	2009-12-11 00:00:00	20000
39	101	10	debit	2009-12-11 00:00:00	50000
40	112	3	kredit	2009-12-13 00:00:00	100000
41	103	2	kredit	2009-12-14 00:00:00	100000
42	105	3	kredit	2009-12-14 00:00:00	50000
43	102	5	debit	2009-12-15 00:00:00	200000
44	104	7	debit	2009-12-16 00:00:00	40000
45	103	9	debit	2009-12-17 00:00:00	100000
46	121	3	debit	2009-12-17 00:00:00	20000
47	133	2	kredit	2009-12-20 00:00:00	50000
48	142	5	kredit	2009-12-23 00:00:00	50000
49	109	7	debit	2009-12-23 00:00:00	100000
50	110	9	debit	2009-12-27 00:00:00	50000

50 rows in set (0.000 sec)