Nama   : Moch Afrizal
NIM   : L200180022
Kelas   : B

Laporan Praktikum
Basis Data
Modul 5

1. Menambah nasabah.

   Kode :

   ```
   MariaDB [modul_5]> INSERT INTO nasabah(id_nasabah, nama_nasabah, alamat_nasabah)
       -> VALUES(11, 'Budi Murtopo', 'Jl. Perak 20'),
       -> (12, 'Budi Subagiyo', 'Jl. AhmadYani 10'),
       -> (13, 'Sumaryanto', 'Jl. Nanas 2'),
       -> (14, 'Sulatan Wakanda', 'Jl. Asia Frika 1'),
       -> (15, 'Rudi', 'Jl. Semangka 33'),
       -> (16, 'Yerika', 'Jl. Salak 76'),
       -> (17, 'Michele', 'Jl. Duku 56'),
       -> (18, 'Kevin', 'Jl. Lemon 24'),
       -> (19, 'Ahmad', 'Jl. Obama 8'),
       -> (20, 'Ahmad Sudarmono', 'Jl. Donald 22');
   ```

   Hasil :

   ```
   MariaDB [modul_5]> 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 | Budi Murtopo    | Jl. Perak 20           |
   |         12 | Budi Subagiyo   | Jl. AhmadYani 10       |
   |         13 | Sumaryanto      | Jl. Nanas 2            |
   |         14 | Sulatan Wakanda | Jl. Asia Frika 1       |
   |         15 | Rudi            | Jl. Semangka 33        |
   |         16 | Yerika          | Jl. Salak 76           |
   |         17 | Michele         | Jl. Duku 56            |
   |         18 | Kevin           | Jl. Lemon 24           |
   |         19 | Ahmad           | Jl. Obama 8            |
   |         20 | Ahmad Sudarmono | Jl. Donald 22          |
   +------------+-----------------+-------------------------+
   19 rows in set (0.06 sec)
   ```

2. Menambah cabang bank.
   Kode :

```
MariaDB [modul_5]> INSERT INTO cabang_bank(kode_cabang, nama_cabang, alamat_cabang)
    -> VALUES('BRUA', 'Bank Rut Unit Aceh', 'Jl. Ahmad Yani 8'),
    -> ('BRUC', 'Bank Rut Unit Cilacap', 'Jl. Tentara Pelajar 34'),
    -> ('BRUD', 'Bank Rut Unit Demak', 'Jl. Slamet Raharjo 5'),
    -> ('BRUBB', 'Bank Rut Unit Bangka Belitung', 'Jl. Kenangan 12'),
    -> ('BRUS', 'Bank Rut Unit Surakarta', 'Jl. Slamet Riyadi 18'),
    -> ('BRUSE', 'Bank Rut Unit Semarang', 'Jl. Nangka 22'),
    -> ('BRUN', 'Bank Rut Unit Ngawi ', 'Jl. Slamet 6'),
    -> ('BRUSD', 'Bank Rut Unit Sungai Danau', 'Jl. Gethek 2'),
    -> ('BRUS', 'Bank Rut Unit Surakarta', 'Jl. Slamet Riyadi 18'),
    -> ('BRUSR', 'Bank Rut Unit Solo Raya', 'Jl. Slamet Riyadi 54');
```

Hasil :

```
MariaDB [modul_5]> select * from cabang_bank;
+-------------+--------------------------------+--------------------------+
| kode_cabang | nama_cabang                    | alamat_cabang            |
+-------------+--------------------------------+--------------------------+
| BRUA        | Bank Rut Unit Aceh             | Jl. Ahmad Yani 8         |
| BRUB        | Bank Rut Unit Boyolali         | Jl. Ahmad yani 45        |
| BRUBB       | Bank Rut Unit Bangka Belitung  | Jl. Kenangan 12          |
| BRUC        | Bank Rut Unit Cilacap          | Jl. Tentara Pelajar 34   |
| BRUD        | Bank Rut Unit Demak            | Jl. Slamet Raharjo 5     |
| BRUK        | Bank Rut Unit Klaten           | Jl. Suparman 23          |
| BRUN        | Bank Rut Unit Ngawi            | Jl. Slamet 6             |
| BRUS        | Bank Rut Unit Surakarta        | Jl. Slamet Riyadi 18     |
| BRUSD       | Bank Rut Unit Sungai Danau     | Jl. Gethek 2             |
| BRUSE       | Bank Rut Unit Semarang         | Jl. Nangka 22            |
| BRUSI       | Bank Rut Unit Sidoarjo         | Jl. Slamet Riyadi 33     |
| BRUSR       | Bank Rut Unit Solo Raya        | Jl. Slamet Riyadi 54     |
| BRUSUR      | Bank Rut Unit Surabaya         | Jl. Slamet Riyadi 18     |
| BRUW        | Bank Rut Unit Wonogiri         | Jl. A.Yani No.23         |
| BRUY        | Bank Rut Unit Yogyakarta       | Jl. Anggrek 21           |
+-------------+--------------------------------+--------------------------+
15 rows in set (0.04 sec)
```

3. Menambah rekening.

    Kode :

```
MariaDB [modul_5]> INSERT INTO rekening(no_rekening, kode_cabangFK, pin, saldo)
    -> VALUES('114', 'BRUC', '1112', '55000'),
    -> ('115', 'BRUC', '1113', '35000'),
    -> ('116', 'BRUS', '1114', '150000'),
    -> ('117', 'BRUS', '1115', '546376'),
    -> ('118', 'BRUSR', '1116', '333000'),
    -> ('119', 'BRUD', '1117', '220000'),
    -> ('120', 'BRUC', '1118', '1000000'),
    -> ('121', 'BRUD', '1119', '20000'),
    -> ('122', 'BRUD', '1120', '500000'),
    -> ('123', 'BRUD', '1121', '12000');
```

Hasil :

```
MariaDB [modul_5]> 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 | BRUC         | 1112 |   55000 |
|        115 | BRUC         | 1113 |   35000 |
|        116 | BRUS         | 1114 |  150000 |
|        117 | BRUS         | 1115 |  546376 |
|        118 | BRUSR        | 1116 |  333000 |
|        119 | BRUD         | 1117 |  220000 |
|        120 | BRUC         | 1118 | 1000000 |
|        121 | BRUD         | 1119 |   20000 |
|        122 | BRUD         | 1120 |  500000 |
|        123 | BRUD         | 1121 |   12000 |
+------------+--------------+------+---------+
23 rows in set (0.04 sec)
```

4. Menambah nasabah_has_rekening.

Kode :

```
MariaDB [modul_5]> INSERT INTO nasabah_has_rekening(id_nasabahFK, no_rekeningFK)
    -> VALUES(11, 114),
    -> (12,115),
    -> (13,116),
    -> (14,117),
    -> (15,118),
    -> (16,119),
    -> (17,120),
    -> (18,121),
    -> (19,122),
    -> (20,123);
```

```
MariaDB [modul_5]> 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 |
|           12 |           115 |
|           13 |           116 |
|           14 |           117 |
|           15 |           118 |
|           16 |           119 |
|           17 |           120 |
|           18 |           121 |
|           19 |           122 |
|           20 |           123 |
```

5. Menambah transaksi.

Kode :

```
MariaDB [modul_5]> INSERT INTO transaksi(no_transaksi, no_rekeningFK, id_nasabahFK, jenis_transaksi, tanggal, jumlah)
    -> VALUES(31, 115, 12, 'debit', '2009-11-10', 55000 ),
    -> (32, 115, 12, 'debit', '2009-11-10', 355000 ),
    -> (33, 116, 13, 'debit', '2009-11-20', 355000 ),
    -> (34, 117, 14, 'debit', '2009-11-10', 356000 ),
    -> (35, 118, 15, 'debit', '2009-11-20', 356000 ),
    -> (36, 119, 16, 'debit', '2009-11-10', 356000 ),
    -> (37, 120, 17, 'debit', '2009-11-20', 356000 ),
    -> (38, 121, 18, 'debit', '2009-11-10', 356000 ),
    -> (39, 122, 19, 'debit', '2009-11-20', 200000 ),
    -> (40, 123, 20, 'debit', '2009-11-10', 200000 ),
    -> (41, 115, 12, 'kredit', '2009-11-20', 200000 ),
    -> (42, 116, 13, 'kredit', '2009-11-22', 200000 ),
    -> (43, 117, 14, 'debit', '2009-11-22', 200000 ),
    -> (44, 118, 15, 'kredit', '2009-11-22', 500000 ),
    -> (45, 119, 16, 'kredit', '2009-11-22', 500000 ),
    -> (46, 120, 17, 'kredit', '2009-11-22', 500000 ),
    -> (47, 121, 18, 'kredit', '2009-11-25', 500000 ),
    -> (48, 122, 19, 'kredit', '2009-11-25', 500000 ),
    -> (49, 123, 20, 'kredit', '2009-11-25', 342500 ),
    -> (50, 115, 12, 'kredit', '2009-11-25', 342500 );
```

Hasil :

kesimpulan dari percobaan diatas adalah saat kita memasukkan record ke dalam database maka secara otomatis data di dalam database bertambah dan sesuai pada tabel yang ada

```
MariaDB [modul_5]> 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 |           12 |          115 | debit          | 2009-11-10 00:00:00 |  55000 |
|          32 |           12 |          115 | debit          | 2009-11-10 00:00:00 | 355000 |
|          33 |           13 |          116 | debit          | 2009-11-20 00:00:00 | 355000 |
|          34 |           14 |          117 | debit          | 2009-11-10 00:00:00 | 356000 |
|          35 |           15 |          118 | debit          | 2009-11-20 00:00:00 | 356000 |
|          36 |           16 |          119 | debit          | 2009-11-10 00:00:00 | 356000 |
|          37 |           17 |          120 | debit          | 2009-11-20 00:00:00 | 356000 |
|          38 |           18 |          121 | debit          | 2009-11-10 00:00:00 | 356000 |
|          39 |           19 |          122 | debit          | 2009-11-20 00:00:00 | 200000 |
|          40 |           20 |          123 | debit          | 2009-11-10 00:00:00 | 200000 |
|          41 |           12 |          115 | kredit         | 2009-11-20 00:00:00 | 200000 |
|          42 |           13 |          116 | kredit         | 2009-11-22 00:00:00 | 200000 |
|          43 |           14 |          117 | debit          | 2009-11-22 00:00:00 | 200000 |
|          44 |           15 |          118 | kredit         | 2009-11-22 00:00:00 | 500000 |
|          45 |           16 |          119 | kredit         | 2009-11-22 00:00:00 | 500000 |
|          46 |           17 |          120 | kredit         | 2009-11-22 00:00:00 | 500000 |
|          47 |           18 |          121 | kredit         | 2009-11-25 00:00:00 | 500000 |
|          48 |           19 |          122 | kredit         | 2009-11-25 00:00:00 | 500000 |
|          49 |           20 |          123 | kredit         | 2009-11-25 00:00:00 | 342500 |
|          50 |           12 |          115 | kredit         | 2009-11-25 00:00:00 | 342500 |
+-------------+--------------+--------------+----------------+---------------------+--------+
50 rows in set (0.05 sec)
```