

DATABASE SYSTEM PRACTICE
ASSIGNMENT
QUERY STANDART AND VARIATION



By :

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Latihan

1. Login as root to MYSQL via Command Prompt

```
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: 10.4.11-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.
```

2. Create the database and use perbankan's database

```
MariaDB [(none)]> use perbankan;
ERROR 1049 (42000): Unknown database 'perbankan'
MariaDB [(none)]> create database perbankan;
Query OK, 1 row affected (0.009 sec)

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

3. Display bank names and bank addresses for all bank branches and sorted by bank name

```
MariaDB [perbankan]> SELECT nama_cabang, alamat_cabang FROM cabang_bank ORDER BY nama_cabang;
+-----+-----+
| nama_cabang          | alamat_cabang          |
+-----+-----+
| Bank Rut Unit Amuntai | Jl. Anggrek 28         |
| Bank Rut Unit Boyolali | Jl. Ahmad Yani 18      |
| Bank Rut Unit Ciamis   | Jl. Bekasi 99         |
| Bank Rut Unit Demak    | Jl. Pati 98           |
| Bank Rut Unit Grogol   | Jl. Pangandaran 35    |
| Bank Rut Unit Jambi    | Jl. Sutoyo 82         |
| Bank Rut Unit Klaten   | Jl. Suparman 23       |
| Bank Rut Unit Lamongan | Jl. Lumajang Timur 33 |
| Bank Rut Unit Nunukan  | Jl. Samarinda 32      |
| Bank Rut Unit Pelaihari | Jl. Ahmad Yani 55     |
| Bank Rut Unit Rantau   | Jl. Kandangan lawas 88 |
| Bank Rut Unit Surakarta | Jl. Slamet Riyadi 18  |
| Bank Rut Unit Takisung  | Jl. Raya Takisung 12  |
| Bank Rut Unit Wonogiri  | Jalan A. Yani NO. 23  |
| Bank Rut Unit Yogyakarta | Jl. Anggrek 21       |
+-----+-----+
15 rows in set (0.003 sec)
```

4. Displays account numbers, pins, and balance amounts for all accounts and are sorted by the amount of balance from the largest to the smallest

```
MariaDB [perbankan]> SELECT no_rekening, pin, saldo FROM rekening ORDER BY saldo DESC;
```

no_rekening	pin	saldo
108	0	5000000
106	6666	3000000
105	5555	2000000
107	7777	1000000
104	4444	900000
103	3333	750000
110	1234	550000
101	1111	500000
102	2222	350000
112	123	300000
113	8888	255000
117	1555	200000
119	2332	175000
118	2111	150000
111	4321	150000
123	3222	125000
116	1444	100000
120	2444	90000
122	3113	85000
121	2555	55000
115	1333	50000
114	1222	20000
109	9999	0

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

Tugas

- 1) Display customer names and customer addresses, it aresorted by customer name

```
MariaDB [perbankan]> SELECT nama_nasabah, alamat_nasabah FROM nasabah ORDER BY nama_nasabah;
```

nama_nasabah	alamat_nasabah
Budi Eko Prayogo	Jl. Kantil 30
Budi Martono	Jl. Merak 22
Canka Lokananta	Jl. Tidar 86
Charisma Ratu Islamiah	Jl. PT SUn 10
Endah Sufiyati	Jl. Datu Daim 2
Hayuningtas Mustika Wening	Komplek CIP D11
Kartika Padmasari	Jl. Manggis 15
Linda Nor Syifa	Komplek Kijang Kencana A11
Maryati	Jl. MT. Haryono 31
Nida Luthfina	Jl. Nor Sehat 33
Nor Aisyah Maulida	Jl. Samudra 14
Nur Annida Iffah Supardi	Jl. Bekatung 5
Nurhanisya Mayasari	Komplek CIP E17
Pratiwi Ardi Lestari	Jl. Raya Takisung 47
Ristiana Widianing Tyas	Jl. Sungai Riam 88
Sari Murti	Jl. Pangandaran 11
Satria Eka Jaya	Jl. Slamet Riyadi 45
Suparman	Jl.Hasanudin 81
Sutopo	Jl. Jendral Sudirman 12

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

- 2) Show transaction types and number of transactions where the transaction type is credit

```
MariaDB [perbankan]> SELECT jenis_transaksi, jumlah FROM transaksi WHERE jenis_transaksi = 'kredit';
```

jenis_transaksi	jumlah
kredit	20000
kredit	30000
kredit	200000
kredit	150000
kredit	50000
kredit	200000
kredit	100000
kredit	20000
kredit	50000
kredit	200000
kredit	100000
kredit	100000
kredit	200000
kredit	30000
kredit	100000
kredit	100000
kredit	150000
kredit	50000
kredit	300000
kredit	200000
kredit	150000
kredit	90000

```
22 rows in set (0.007 sec)
```

- 3) Show the types of transactions and the number of transactions that made transactions on November 21, 2009 and are sorted by number of transactions

```
MariaDB [perbankan]> SELECT jenis_transaksi, jumlah FROM transaksi WHERE tanggal = '2009-11-21' ORDER BY jumlah;
```

jenis_transaksi	jumlah
debit	40000

```
1 row in set (0.008 sec)
```

- 4) Display the name of the customer, type of transaction and transaction amount in which the transaction amount is IDR 20,000

```
MariaDB [perbankan]> SELECT nama_nasabah, jenis_transaksi, jumlah FROM nasabah, transaksi WHERE jumlah = '20000';
```

nama_nasabah	jenis_transaksi	jumlah
Sutopo	kredit	20000
Maryati	kredit	20000
Suparman	kredit	20000
Kartika Padmasari	kredit	20000
Budi Eko Prayogo	kredit	20000
Satria Eka Jaya	kredit	20000
Sari Murti	kredit	20000
Canka Lokananta	kredit	20000
Budi Martono	kredit	20000
Nor Aisya Maulida	kredit	20000
Endah Sufiyati	kredit	20000
Nida Luthfina	kredit	20000
Charisma Ratu Islamiah	kredit	20000
Nur Annida Iffah Supardi	kredit	20000
Ristiana Widianing Tyas	kredit	20000
Pratiwi Andi Lestari	kredit	20000
Hayuningtas Mustika Wening	kredit	20000
Linda Nor Syifa	kredit	20000
Nurhanisya Mayasari	kredit	20000
Sutopo	debit	20000
Maryati	debit	20000
Suparman	debit	20000
Kartika Padmasari	debit	20000
Budi Eko Prayogo	debit	20000
Satria Eka Jaya	debit	20000
Sari Murti	debit	20000
Canka Lokananta	debit	20000
Budi Martono	debit	20000
Nor Aisya Maulida	debit	20000
Endah Sufiyati	debit	20000
Nida Luthfina	debit	20000
Charisma Ratu Islamiah	debit	20000
Nur Annida Iffah Supardi	debit	20000

Ristiana Widianing Tyas	debit	20000
Pratiwi Ardi Lestari	debit	20000
Hayuningtas Mustika Wening	debit	20000
Linda Nor Syifa	debit	20000
Nurhanisya Mayasari	debit	20000
Sutopo	kredit	20000
Maryati	kredit	20000
Suparman	kredit	20000
Kartika Padmasari	kredit	20000
Budi Eko Prayogo	kredit	20000
Satria Eka Jaya	kredit	20000
Sari Murti	kredit	20000
Canka Lokananta	kredit	20000
Budi Martono	kredit	20000
Nor Aisya Maulida	kredit	20000
Endah Sufiyati	kredit	20000
Nida Luthfina	kredit	20000
Charisma Ratu Islamiah	kredit	20000
Nur Annida Iffah Supardi	kredit	20000
Ristiana Widianing Tyas	kredit	20000
Pratiwi Ardi Lestari	kredit	20000
Hayuningtas Mustika Wening	kredit	20000
Linda Nor Syifa	kredit	20000
Nurhanisya Mayasari	kredit	20000
Sutopo	debit	20000
Maryati	debit	20000
Suparman	debit	20000
Kartika Padmasari	debit	20000
Budi Eko Prayogo	debit	20000
Satria Eka Jaya	debit	20000
Sari Murti	debit	20000
Canka Lokananta	debit	20000
Budi Martono	debit	20000
Nor Aisya Maulida	debit	20000
Endah Sufiyati	debit	20000
Nida Luthfina	debit	20000
Charisma Ratu Islamiah	debit	20000
Nur Annida Iffah Supardi	debit	20000
Ristiana Widianing Tyas	debit	20000

Pratiwi Ardi Lestari	debit	20000
Hayuningtas Mustika Wening	debit	20000
Linda Nor Syifa	debit	20000
Nurhanisya Mayasari	debit	20000
Sutopo	debit	20000
Maryati	debit	20000
Suparman	debit	20000
Kartika Padmasari	debit	20000
Budi Eko Prayogo	debit	20000
Satria Eka Jaya	debit	20000
Sari Murti	debit	20000
Canka Lokananta	debit	20000
Budi Martono	debit	20000
Nor Aisya Maulida	debit	20000
Endah Sufiyati	debit	20000
Nida Luthfina	debit	20000
Charisma Ratu Islamiah	debit	20000
Nur Annida Iffah Supardi	debit	20000
Ristiana Widianing Tyas	debit	20000
Pratiwi Ardi Lestari	debit	20000
Hayuningtas Mustika Wening	debit	20000
Linda Nor Syifa	debit	20000
Nurhanisya Mayasari	debit	20000

95 rows in set (0.004 sec)

- 5) Display the customer name and customer address with the begins name 'SU'

```
MariaDB [perbankan]> SELECT nama_nasabah, alamat_nasabah FROM nasabah WHERE nama_nasabah LIKE 'Su%';
```

nama_nasabah	alamat_nasabah
Sutopo	Jl. Jendral Sudirman 12
Suparman	Jl.Hasanudin 81

2 rows in set (0.000 sec)

- 6) Display the account number and transaction amount of all transactions using 2 conditions in the 'WHERE' clause namely the id number account is 105 and the transaction amount is Rp 50.000

```
MariaDB [perbankan]> SELECT no_rekeningFK, jumlah FROM transaksi WHERE no_rekeningFK = 105 OR jumlah = 50.000;
```

no_rekeningFK	jumlah
105	50000
105	50000
105	40000
105	100000
105	50000
105	35000
105	75000

7 rows in set (0.001 sec)

- 7) Show displays customer id, type of transaction, and date, where the type of transaction is credit, November 22, 2009 and the number of transactions is less than equal to Rp150,000

```
MariaDB [perbankan]> SELECT id_nasabahFK, jenis_transaksi, tanggal FROM transaksi
-> WHERE jenis_transaksi='kredit' AND tanggal = '2009-11-22' AND jumlah<=150000;
```

id_nasabahFK	jenis_transaksi	tanggal
1	kredit	2009-11-22 00:00:00
4	kredit	2009-11-22 00:00:00

2 rows in set (0.005 sec)

- 8) Display branch names and addresses of all branch bank branches that sorted by branch name with a limit of 5 and offset of 8

```
MariaDB [perbankan]> SELECT nama_cabang, alamat_cabang FROM Cabang_bank ORDER BY nama_cabang LIMIT 5 OFFSET 8;
```

nama_cabang	alamat_cabang
Bank Rut Unit Nunukan	Jl. Samarinda 32
Bank Rut Unit Pelaihari	Jl. Ahmad Yani 55
Bank Rut Unit Rantau	Jl. Kandangan lawas 88
Bank Rut Unit Surakarta	Jl. Slamet Riyadi 18
Bank Rut Unit Takisung	Jl. Raya Takisung 12

5 rows in set (0.003 sec)

- 9) Show the data form nasabah table, to display the name of nasabah begin with N and other data is null.

```
MariaDB [perbankan]> SELECT*FROM nasabah WHERE nama_nasabah LIKE 'N%' AND alamat_nasabah IS NOT NULL;
```

id_nasabah	nama_nasabah	alamat_nasabah
11	Nor Aisya Maulida	Jl. Samudra 14
13	Nida Luthfina	Jl. Nor Sehat 33
15	Nur Annida Iffah Supardi	Jl. Bekatung 5
20	Nurhanisya Mayasari	Komplek CIP E17

4 rows in set (0.006 sec)

- 10) Apply string search, NULL search and use the 'ORDER', 'LIMIT' and OFFSET clauses

```
MariaDB [perbankan]> SELECT*FROM transaksi WHERE jenis_transaksi = 'debit' AND tanggal IS NOT NULL ORDER BY jumlah LIMIT 4 OFFSET 10;
```

no_transaksi	id_nasabahFK	no_rekeningFK	jenis_transaksi	tanggal	jumlah
12	1	104	debit	2009-11-19 00:00:00	50000
33	6	105	debit	2010-01-03 00:00:00	50000
24	1	104	debit	2009-12-01 00:00:00	50000
26	4	101	debit	2009-12-04 00:00:00	50000

4 rows in set (0.001 sec)

- 11) Displays the name of the customer from the customer table starting with the letter s

```
MariaDB [perbankan]> SELECT*FROM nasabah WHERE nama_nasabah LIKE 'S%';
```

id_nasabah	nama_nasabah	alamat_nasabah
1	Sutopo	Jl. Jendral Sudirman 12
3	Suparman	Jl.Hasanudin 81
6	Satria Eka Jaya	Jl. Slamet Riyadi 45
8	Sari Murti	Jl. Pangandaran 11

4 rows in set (0.001 sec)

- 12) Displays a table of bank branches sorted according to branch code by only showing 7 lines

```
MariaDB [perbankan]> SELECT*FROM cabang_bank ORDER BY kode_cabang LIMIT 7;
```

kode_cabang	nama_cabang	alamat_cabang
BRUA	Bank Rut Unit Amuntai	Jl. Anggrek 28
BRUB	Bank Rut Unit Boyolali	Jl. Ahmad Yani 18
BRUC	Bank Rut Unit Ciamis	Jl. Bekasi 99
BRUD	Bank Rut Unit Demak	Jl. Pati 98
BRUG	Bank Rut Unit Grogol	Jl. Pangandaran 35
BRUJ	Bank Rut Unit Jambi	Jl. Sutoyo 82
BRUK	Bank Rut Unit Klaten	Jl. Superman 23

7 rows in set (0.001 sec)

- 13) Displaying counts of less than 5 from the customer_has_rekening table

```
MariaDB [perbankan]> SELECT*FROM nasabah_has_rekening WHERE id_nasabahFK <= 5;
```

id_nasabahFK	no_rekeningFK
1	104
2	103
3	105
3	106
4	101
4	107
5	102
5	107

8 rows in set (0.000 sec)

- 14) Display the transaction table with the type of debit transaction and the amount is less than Rp. 50,000

```
MariaDB [perbankan]> SELECT*FROM transaksi WHERE jenis_transaksi = 'debit' AND jumlah < 50000;
```

no_transaksi	id_nasabahFK	no_rekeningFK	jenis_transaksi	tanggal	jumlah
2	2	103	debit	2009-11-10 00:00:00	40000
8	5	102	debit	2009-11-16 00:00:00	20000
14	3	105	debit	2009-11-21 00:00:00	40000
23	5	102	debit	2009-11-30 00:00:00	20000
25	2	103	debit	2009-12-02 00:00:00	40000
30	9	110	debit	2009-12-06 00:00:00	20000
37	3	104	debit	2010-01-06 00:00:00	30000
38	5	106	debit	2010-01-07 00:00:00	25000
41	8	105	debit	2010-01-13 00:00:00	35000
42	4	103	debit	2010-02-01 00:00:00	25000

10 rows in set (0.001 sec)

15) Display an account table with a balance of more than Rp 1,000,000 and a limit of 10

```
MariaDB [perbankan]> SELECT*FROM rekening WHERE saldo > 1000000 ORDER BY no_rekening LIMIT 10;
```

no_rekening	kode_cabangFK	pin	saldo
105	BRUM	5555	2000000
106	BRUS	6666	3000000
108	BRUB	0	5000000

3 rows in set (0.001 sec)