

PRACTICUM DATABASE SYSTEM

MODUL 6

DATABASE SYSTEM



By :

Donny Rizal Adhi Pratama

L200183161

INFORMATION TECHNOLOGY

FACULTY OF COMMUNICATION AND INFORMATICS

MUHAMMADIYAH UNIVERSITY OF SURAKARTA

#Latian

```
XAMPP for Windows - mysql -u root
MariaDB [perbankan]> select nama_cabang, alamat_cabang from cabang_bank order by nama_cabang;
```

nama_cabang	alamat_cabang
Bank Rut Unit Aljazaier	Jl. Indonesia no. 12
Bank Rut Unit Bandungan	Jl. Hebohhehhh no. 12
Bank Rut Unit Boyolali	Jl. Ahmad Yani 45
Bank Rut Unit Cirebon	Jl. Pemuda no. 12
Bank Rut Unit Himalaya	Nepal Street no. 13
Bank Rut Unit Jakarta	Jl. Tugu Pemuda no. 21
Bank Rut Unit Jambi	Jl. Kelok Sembian no. 12
Bank Rut Unit Klate	Jl. Suparman 23
Bank Rut Unit Lamongan	Jl. Laksana Maeda no. 2
Bank Rut Unit Malang	Jl. Batu no. 12
Bank Rut Unit Pati	Jl. Pati-Kudu no. 1
Bank Rut Unit Rembang	Jl. Gajah Mada no. 12
Bank Rut Unit Surakarta	Jl. Slamet Riyadi 18
Bank Rut Unit Wonogiri	Jalan A. Yani No. 23
Bank Rut Unit Yogyakarta	Jl. Anggrek 21

```
15 rows in set (0.001 sec)

MariaDB [perbankan]> select no_rekening, pin, saldo from rekening order by saldo desc;
```

no_rekening	pin	saldo
124	8284823	2147483647
117	13428	64088829
120	222228	24100000
115	125218	12521242
123	69872	8600000
122	08778	8183900
103	3333	7500000
121	622088	5000000
108	0000	5000000
106	6666	3000000
116	725724	2027400
107	7777	1000000
114	627428	999999
118	62525	900129
104	4444	900000
119	6224	700024
110	1234	550000
101	1111	500000
102	2222	350000
112	0123	300000
113	8888	255000
105	5555	200000
111	4321	150000
109	9999	0

Pict 1. Latian brooo

#Tugas

Number 1.

```
XAMPP for Windows - mysql -u root

Setting environment for using XAMPP for Windows.
donny@DONNY c:\xampp
# mysql -u root
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.

MariaDB [(none)]> use perbankan;
Database changed
MariaDB [perbankan]> show tables;
+-----+
| Tables_in_perbankan |
+-----+
| cabang_bank          |
| nasabah              |
| nasabah_has_rekening |
| rekening             |
| transaksi            |
+-----+
5 rows in set (0.005 sec)

MariaDB [perbankan]> select nama_nasabah, alamat_nasabah from nasabah order by nama_nasabah;
+-----+-----+
| nama_nasabah | alamat_nasabah |
+-----+-----+
| Budi Eko Prayoga | Jl.Kantil 30 |
| Budi Murtono     | Jl. Merak 22 |
| Canka Lokonanta  | Jl. Tidar 95 |
| Donny Rizal      | Jl. Noname Street no. 32 |
| Kartika Padmasari | Jl.Manggis 15 |
| LeBron James     | Jl. Davie 504 |
| Lonzo Ball       | Brindgam inhsa street no. 58 |
| Luka Doncic      | Noname Street 12 |
| Maryati          | Jl.MT.Haryono 31 |
| Ryota            | Jl. Slamet Riyadi no. 21 |
| Sari Murti       | Jl. Pangandaran 11 |
| Satria Eka Jaya  | Jl. Slamet Riyadi 45 |
| Superman         | Jl.Hasanudin 81 |
| Sutopo           | Jl. Jendral Sudirman |
| Takahiro Moriuchi | Akibahara Street no. 12, Los Angeles |
| Takeru Satoh     | Jl. Gajah Mada no. 5 |
| Tomoya Kanki     | Jl. Panglima Soedirman no. 13 |
| Toru Yamashita   | Yoroponggi Street no. 99 |
| Trae Young       | Not Applicable Street no. 2 |
| Zion Williamson  | New Orleans Pelican no. 24 |
+-----+-----+
20 rows in set (0.035 sec)
```

Pict 2. Nama nasabah dan alamat nasabah order by nama nasabah

Number 2.

```
XAMPP for Windows - mysql -u root
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	20000
kredit	50000
kredit	200000
kredit	100000
kredit	100000
kredit	200000
kredit	205000
kredit	1600000
kredit	500000
kredit	50000
kredit	1030000

```
17 rows in set (0.008 sec)
```

Pict 3. Jenis transaksi and jumlah transaksi where jenis transaksi = kredit

```
MariaDB [perbankan]> select jenis_transaksi, jumlah from transaksi where tanggal = '2020-03-29 20:51:26' order by jumlah;
```

jenis_transaksi	jumlah
debit	20000
debit	20000
kredit	20000
debit	20000
kredit	20000
kredit	30000
debit	40000
debit	40000
debit	40000
debit	50000
debit	50000
debit	50000
debit	50000
kredit	50000
debit	50000
debit	50000
kredit	50000
debit	50000
debit	100000
debit	100000
kredit	100000
debit	100000
kredit	100000
debit	100000
debit	100000
kredit	150000
kredit	200000
kredit	200000
kredit	200000

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

Pict 4. Jenis transaksi and jumlah transaksi where tanggal '2020-03-29 20:51:26'

#disclaimer: since I used datetime and default set null and I took a code 'null' before in the modul-5 and I change the way book teaches us.

Number 4.

```
MariaDB [perbankan]> select nama_nasabah, jenis_transaksi, jumlah from nasabah, transaksi where jumlah = 20000 and nasabah.id_nasabah = transaksi.no_rekeningFK;
```

nama_nasabah	jenis_transaksi	jumlah
Kartika Padmasari	kredit	20000
Budi Eko Prayoga	debit	20000
Kartika Padmasari	kredit	20000
Budi Eko Prayoga	debit	20000
Canka Lokonanta	debit	20000

5 rows in set (0.001 sec)

Pict 5. Nama nasabah, jenis transaksi and jumlah transaksi where jumlah transaksi = 20000 and nasabah.id_nasabah = transaksi.no_rekeningFK

Number 5.

```
MariaDB [perbankan]> select nama_nasabah, alamat_nasabah from nasabah where nama_nasabah like 'Su%';
```

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

2 rows in set (0.001 sec)

Pict 6. Nama_nasabah, alamat_nasabah where nama anasabah like Su

Number 6.

```
MariaDB [perbankan]> select nama_nasabah, alamat_nasabah from nasabah where nama_nasabah like 'Su%' or nama_nasabah like '%on';
```

nama_nasabah	alamat_nasabah
Sutopo	Jl. Jendral Sudirman
Suparman	Jl.Hasanudin 81
Zion Williamson	New Orleans Pelican no. 24

3 rows in set (0.001 sec)

Pict 7. Nama nasabah, alamat nasabah from nasabah where like su or on

Number 7.

```
MariaDB [perbankan]> select nama_nasabah, alamat_nasabah from nasabah where nama_nasabah like '%ta' or nama_nasabah like '%ru' or alamat_nasabah like '%gajah';
```

nama_nasabah	alamat_nasabah
Canka Lokonanta	Jl. Tidar 95
Toru Yamashita	Yoroponggi Street no. 99

2 rows in set (0.001 sec)

Pict 8. nama nasabah, alamat nasabah from nasabah where nama nasabah like ta or ru or
gajah on alamat nasabah

Number 8.

```
MariaDB [perbankan]> select id_nasabah, nama_nasabah, alamat_nasabah from nasabah order by id_nasabah limit 5 offset 2;
```

id_nasabah	nama_nasabah	alamat_nasabah
3	Suparman	Jl.Hasanudin 81
4	Kartika Padmasari	Jl.Manggis 15
5	Budi Eko Prayoga	Jl.Kantil 30
6	Satria Eka Jaya	Jl. Slamet Riyadi 45
8	Sari Murti	Jl. Pangandaran 11

5 rows in set (0.000 sec)

Pict 9. Id nasbah, nama nasabah, alamat nasabah from nasabah order by id nasabah limit 5
offset 2

Number 9.

Explain no rekening that has pin int 1 AND 2 AND saldo is not null

```
MariaDB [perbankan]> select no_rekening from rekening where pin like '%1' or pin like '%2' and saldo is not null;
+-----+
| no_rekening |
+-----+
| 101         |
| 102         |
| 111         |
| 123         |
+-----+
4 rows in set (0.001 sec)
```

Pict 10. Number 9

Number 10.

explain no rekening where pin int 1 AND 2 AND not null order by no rekening show only limit 3 after row 2

```
MariaDB [perbankan]> select no_rekening from rekening where pin like '%1' or pin like '%2' and saldo is not null order by no_rekening limit 3 offset 2;
+-----+
| no_rekening |
+-----+
| 111         |
| 123         |
+-----+
2 rows in set (0.001 sec)

MariaDB [perbankan]> _
```

Pict 11. Number 10

Number 11.

a. Make command to find nama_nasabah that followed by string 'do' in nasabah table and order by id_nasabah

```
MariaDB [perbankan]> select * from nasabah where nama_nasabah like '%Do%' order by id_nasabah;
+-----+-----+-----+
| id_nasabah | nama_nasabah | alamat_nasabah |
+-----+-----+-----+
| 11         | Donny Rizal  | Jl. Noname Street no. 32 |
| 18         | Luka Doncic  | Noname Street 12 |
+-----+-----+-----+
2 rows in set (0.001 sec)
```

Pict 12. Order by id_nasabah

b. find the nama nasabah that has registered into BRUS cabang_bank

```
MariaDB [perbankan]> select nama_nasabah from nasabah, rekening, nasabah_has_rekening where kode_cabang_K = 'BRUS' and rekening.no_rekening = nasabah_has_rekening.no_rekening_K and nasabah_has_rekening.id_nasabah_K = nasabah.id_nasabah;
+-----+
| nama_nasabah |
+-----+
| Maryati      |
| Suparman     |
| Suparman     |
| Kartika Padmasari |
| Kartika Padmasari |
| Budi Iko Prayogo |
| Budi Iko Prayogo |
| Trae Young   |
| Lonzo Ball   |
+-----+
9 rows in set (0.000 sec)
```

Pict 13. nama_nasabah BRUS bank

c. find nama nasabah that had registered in cabang 'BRUM' that had jenis_transaksi debit or kredit

[illegible]

Pict 14. nama_nasabah BRUM with kredit debit

d. find the jenis_transaksi in BRUM cabang_bank

```

mysql> select jml_transaksi from transaksi, rekening, nasabah_has_rekening where kode_cabangK = "BR01" and transaksi.no_rekeningK = nasabah_has_rekening.no_rekeningK and nasabah_has_rekening.no_rekeningK = rekening.no_rekening;
+-----+
| jml_transaksi |
+-----+
| debit         |
| kredit        |
| debit         |
| debit         |
| debit         |
+-----+
1 rows in set (0.001 sec)

```

Pict 15. Jenis_transaksi

e. find nama_nasabah that has name string 'le' or 'on' order by id nasbah that has maximal 3 row in offset 2

```
MariaDB [perbankan]> select nama_nasabah, id_nasabah from nasabah where nama_nasabah like '%L%' or nama_nasabah like '%n%' order by id_nasabah limit 3 offset 2;
```

nama_nasabah	id_nasabah
Donny Rizal	11
LeBron James	12
Zion Williamson	17

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

```
MariaDB [perbankan]>
```

e.

Pict 16. nama_nasabah