

**NAMA : BAITY JANNATIKA**

**NIM : L200180211**

**KELAS : H / PRAKTIKUM SISTEM BASIS DATA**

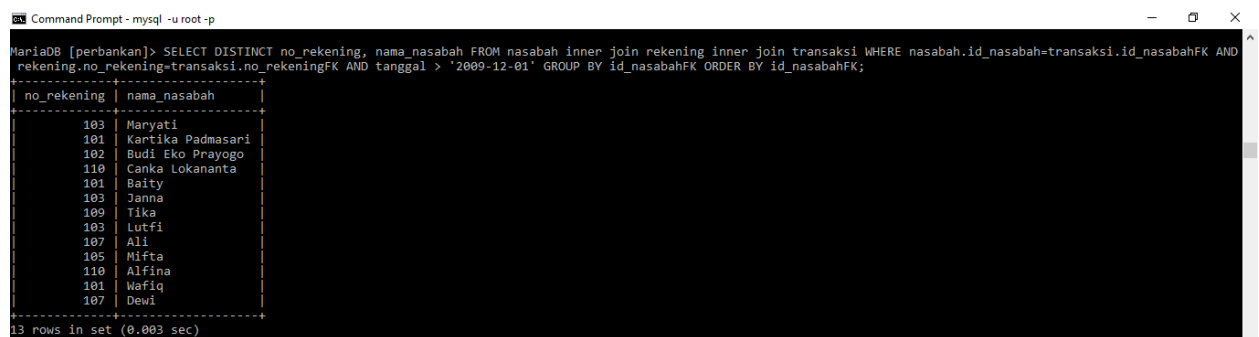
#### UJIAN AKHIR SEMESTER 4

1. Tampilkan no\_rekm nama\_nasabah yang melakukan transaksi di atas tanggal '1 Desember 2009' diurutkan berdasarkan id\_nasabah. Nb : masing-masing id\_nasabah menampilkan satu transaksi, tidak boleh berulang.

(Kerjakan soal-soal dengan menggunakan Using, On, Natural, Outer, Inner, Distinct)

#### JAWABAN

SELECT DISTINCT no\_rekening, nama\_nasabah FROM nasabah inner join rekening inner join transaksi WHERE nasabah.id\_nasabah=transaksi.id\_nasabahFK AND rekening.no\_rekening=transaksi.no\_rekeningFK AND tanggal > '2009-12-01' GROUP BY id\_nasabahFK ORDER BY id\_nasabahFK;



```
Command Prompt - mysql -u root -p
MariaDB [perbankan]> SELECT DISTINCT no_rekening, nama_nasabah FROM nasabah inner join rekening inner join transaksi WHERE nasabah.id_nasabah=transaksi.id_nasabahFK AND rekening.no_rekening=transaksi.no_rekeningFK AND tanggal > '2009-12-01' GROUP BY id_nasabahFK ORDER BY id_nasabahFK;
+-----+-----+
| no_rekening | nama_nasabah |
+-----+-----+
| 103         | Maryati      |
| 101         | Kartika Padmasari |
| 102         | Budi Eko Prayogo |
| 110         | Canka Lokananta |
| 101         | Baity        |
| 103         | Janna        |
| 109         | Tika         |
| 103         | Lutfi        |
| 107         | Ali          |
| 105         | Mifta        |
| 110         | Alfina       |
| 101         | Wafiq        |
| 107         | Dewi         |
+-----+-----+
13 rows in set (0.003 sec)
```

2. Tampilkan id\_nasabah, nama\_cabang, jumlah saldo (dalam sisa saldo) dari masing-masing id\_nasabah dikurangi 75.000 untuk pembayaran SPP.

(Kerjakan soal-soal menggunakan Having, Group By, Distinct)

## JAWABAN

SELECT DISTINCT id\_nasabah, nama\_cabang, (rekening.saldo-75000) as 'JUMLAH SALDO' FROM nasabah INNER JOIN cabang\_bank INNER JOIN rekening INNER JOIN transaksi ON nasabah.id\_nasabah = transaksi.id\_nasabahFK AND rekening.no\_rekening = transaksi.no\_rekeningFK AND cabang\_bank.kode\_cabang = rekening.kode\_cabangFK GROUP BY no\_rekening;

```
Command Prompt - mysql -u root -p
MariaDB [perbankan]> SELECT DISTINCT id_nasabah, nama_cabang, (rekening.saldo-75000) as 'JUMLAH SALDO' FROM nasabah INNER JOIN cabang_bank INNER JOIN rekening INNER JOIN transaksi ON nasabah.id_nasabah = transaksi.id_nasabahFK AND rekening.no_rekening = transaksi.no_rekeningFK AND cabang_bank.kode_cabang = rekening.kode_cabangFK GROUP BY no_rekening;
+-----+-----+-----+
| id_nasabah | nama_cabang | JUMLAH SALDO |
+-----+-----+-----+
| 4 | Bank Rut Cabang Surakarta | 425000 |
| 5 | Bank Rut Cabang Surakarta | 275000 |
| 2 | Bank Rut Cabang Surakarta | 675000 |
| 1 | Bank Rut Unit Magelang | 825000 |
| 3 | Bank Rut Unit Magelang | 1925000 |
| 3 | Bank Rut Cabang Surakarta | 2925000 |
| 5 | Bank Rut Cabang Surakarta | 925000 |
| 10 | Bank Rut Unit Boyolali | 4925000 |
| 13 | Bank Rut Unit Boyolali | -75000 |
| 9 | Bank Rut Unit Yogyakarta | 475000 |
+-----+-----+-----+
10 rows in set (0.045 sec)
```

3. Buatlah user baru dengan No. NIM 3 digit belakang. Kemudian beri privilege pada user, agar dapat melakukan CRUD. Kemudian berikan masing-masing contoh CRUD, setelah berhasil memberikan hak akses pada user.  
(Create, Read, Update, Delete masing-masing di beri contohh.).

## JAWABAN

```
Command Prompt - mysql -u root -p
Microsoft Windows [Version 10.0.16299.1087]
(c) 2017 Microsoft Corporation. All rights reserved.

C:\Users\ASUS>cd..
C:\Users>cd..
C:\>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 751
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 mysql;
Database changed
MariaDB [mysql]> CREATE USER '211'@'localhost' IDENTIFIED BY 'baity';
Query OK, 0 rows affected (0.067 sec)
```

```

MariaDB [mysql]> GRANT INSERT ON perbankan.nasabah TO '211'@'localhost';
Query OK, 0 rows affected (0.046 sec)

MariaDB [mysql]> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.048 sec)

MariaDB [mysql]> GRANT UPDATE ON perbankan.nasabah TO '211'@'localhost';
Query OK, 0 rows affected (0.044 sec)

MariaDB [mysql]> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.002 sec)

MariaDB [mysql]> GRANT DELETE ON perbankan.nasabah TO '211'@'localhost';
Query OK, 0 rows affected (0.028 sec)

MariaDB [mysql]> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.002 sec)

MariaDB [mysql]> GRANT CREATE VIEW ON perbankan.nasabah TO '211'@'localhost';
Query OK, 0 rows affected (0.046 sec)

MariaDB [mysql]> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.002 sec)

MariaDB [mysql]> GRANT SELECT ON perbankan.nasabah TO '211'@'localhost';
Query OK, 0 rows affected (0.062 sec)

MariaDB [mysql]> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.009 sec)

MariaDB [mysql]> exit
Bye

```

Select Command Prompt - mysql -u 211 -p

```

MariaDB [perbankan]> INSERT INTO nasabah VALUES ('32', 'Farida', 'Jl. Lurus 1');
Query OK, 1 row affected (0.414 sec)

MariaDB [perbankan]> UPDATE nasabah SET alamat_nasabah = 'Jl. Terang Benderang 10' WHERE nama_nasabah = 'nana';
Query OK, 1 row affected (0.133 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
8	Sari Murti	Jl. Pangandaran 11
9	Canka Lokananta	Jl. Tidar 86
10	Budi Murtono	Jl. Merak 22
11	Baity	Jl. Mawar 11
12	Janna	Jl. Melati 22
13	Tika	Jl. Barat 33
14	Lutfi	Jl. Utara 44
15	Ali	Jl. Timur 55
16	Mifta	Jl. Selatan 66
17	Alfina	Jl. Tenggara 77
18	Wafiq	Jl. Timur Laut 88
19	Dewi	Jl. Barat Daya 99
20	Farah	Jl. Barat Laut 90
31	nana	Jl. Terang Benderang 10
32	Farida	Jl. Lurus 1

21 rows in set (0.002 sec)

Select Command Prompt - mysql -u 211 -p

```

MariaDB [perbankan]> DELETE FROM nasabah WHERE nama_nasabah = 'nana';
Query OK, 1 row affected (0.154 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	Baity	Jl. Mawar 11
12	Janna	Jl. Melati 22
13	Tika	Jl. Barat 33
14	Lutfi	Jl. Utara 44
15	Ali	Jl. Timur 55
16	Mifta	Jl. Selatan 66
17	Alfina	Jl. Tenggara 77
18	Wafiq	Jl. Timur Laut 88
19	Dewi	Jl. Barat Daya 99
20	Farah	Jl. Barat Laut 90
32	Farida	Jl. Lurus 1

20 rows in set (0.001 sec)

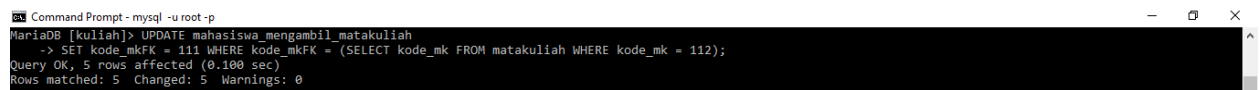
4. Mata kuliah A tidak memenuhi standar kebijakan prodi akan pengadaan/penyelenggaraan kelas karena < 10 mahasiswa disebabkan kurang minatnya mahasiswa akan mata kuliah A. sehingga mahasiswa yang mengambil matakuliah A diharuskan revisi ke matakuliah lain (atau yang sudah terselenggara)
- (Gunakan Sub Query untuk mendapatkan data-data berikut dari database data kuliah yang telah anda bangun pada modul 4 dan modul 5.)

## JAWABAN

Contoh kode 1 :

Merevisi mahasiswa yang mengambil mata kuliah dengan kode 112 yaitu Sistem Operasi diganti dengan matakuliah dengan kode 111 yaitu Sistem Basis Data.

```
UPDATE mahasiswa_mengambil_matakuliah SET kode_mkFK = 111 WHERE  
kode_mkFK = (SELECT kode_mk_FK FROM matakuliah WHERE KODE_MK = 112);
```

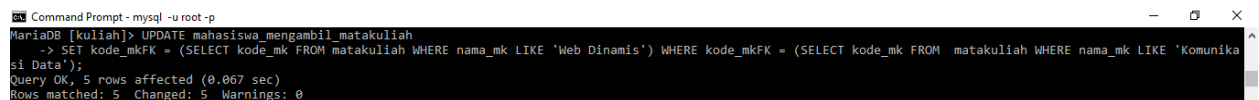


```
Command Prompt - mysql -u root -p  
MariaDB [kuliah]> UPDATE mahasiswa_mengambil_matakuliah  
-> SET kode_mkFK = 111 WHERE kode_mkFK = (SELECT kode_mk FROM matakuliah WHERE kode_mk = 112);  
Query OK, 5 rows affected (0.100 sec)  
Rows matched: 5 Changed: 5 Warnings: 0
```

Contoh kode 2 :

Mahasiswa yang mengambil mata kuliah Web Dinamis (kode 119) harus direvisi ke mata kuliah Komunikasi Data (kode 117).

```
UPDATE mahasiswa_mengambil_matakuliah SET kode_mkFK = (SELECT kode_mk  
FROM matakuliah WHERE nama_mk LIKE 'Web Dinamis') WHERE kode_mkFK =  
(SELECT kode_mk FROM matakuliah WHERE nama_mk LIKE 'Komunikasi Data');
```



```
Command Prompt - mysql -u root -p  
MariaDB [kuliah]> UPDATE mahasiswa_mengambil_matakuliah  
-> SET kode_mkFK = (SELECT kode_mk FROM matakuliah WHERE nama_mk LIKE 'Web Dinamis') WHERE kode_mkFK = (SELECT kode_mk FROM matakuliah WHERE nama_mk LIKE 'Komunikasi Data');  
Query OK, 5 rows affected (0.067 sec)  
Rows matched: 5 Changed: 5 Warnings: 0
```

## Data Awal :

Command Prompt - mysql -u root -p

MariaDB [kuliah]> select \* from mahasiswa\_mengambil\_matakuliah order by kode\_mkFK;

nimFK	kode_mkFK
201901	111
201905	111
201903	111
201907	111
201902	111
201904	112
201902	112
201909	112
201907	112
201903	112
201904	113
201910	113
201909	113
201906	113
201907	113
201908	113
201901	113
201903	113
201907	114
201910	114
201901	114
201905	114
201903	114
201904	114
201909	114
201902	115
201907	115
201908	115
201910	115
201904	115
201902	116
201904	116
201910	116
201909	116
201906	116
201908	117
201906	117
201910	117
201905	117
201902	117
201905	119
201903	119
201906	119
201901	119
201908	119
201906	120
201909	120
201905	120
201908	120
201901	120

50 rows in set (0.002 sec)

## Data Setelah Perubahan :

Command Prompt - mysql -u root -p

MariaDB [kuliah]> SELECT \* FROM mahasiswa\_mengambil\_matakuliah order by kode\_mkFK;

nimFK	kode_mkFK
201901	111
201907	111
201905	111
201903	111
201907	111
201902	111
201902	111
201909	111
201904	111
201907	113
201906	113
201908	113
201909	113
201910	113
201904	113
201901	113
201903	113
201910	114
201909	114
201905	114
201903	114
201901	114
201904	114
201907	114
201902	115
201907	115
201910	115
201908	115
201904	115
201904	116
201902	116
201909	116
201906	116
201910	116

201901	117
201908	117
201908	117
201910	117
201905	117
201903	117
201905	117
201906	117
201906	117
201902	117
201905	120
201909	120
201906	120
201908	120
201901	120

50 rows in set (0.001 sec)