

Nama : Bagus Zizou Satiaji

NIM : L200180212

Kelas : Praktikum Basis Data H

UJIAN AKHIR SEMESTER

1. Tampilkan no_rek, nama_nasabah yang melakukan transaksi di atas tanggal '1 Desember 2009' diurutkan berdasarkan id_nasabah Nb: masing2 id_nasabah menampilkan satu transaksi, tidak boleh berulang. (Kerjakan soal – soal menggunakan Using, On, Natural, Outer, Inner, Distinct).

```
Select Command Prompt - mysql -u root -p
MariaDB [perbankan]> SELECT DISTINCT rekening.no_rekening, nasabah.nama_nasabah
-> FROM transaksi INNER JOIN nasabah
-> ON nasabah.id_nasabah=transaksi.id_nasabahFK NATURAL JOIN rekening
-> WHERE tanggal >'2009-12-1' GROUP BY nasabah.id_nasabah ORDER BY nasabah.id_nasabah;
+-----+-----+
| no_rekening | nama_nasabah |
+-----+-----+
| 101 | Sutopo |
| 101 | Maryati |
| 101 | Suparman |
| 101 | Kartika Padmasari |
| 101 | Budi Eko Prayogo |
| 101 | Satria Eka Jaya |
| 101 | Sari Murti |
| 101 | Canka Lokananta |
| 101 | Budi Murtono |
| 101 | Nizar Armando |
| 101 | Mario Susanto |
| 101 | Rifan Anwar |
| 101 | Ronald Weho |
| 101 | Roban Aliman |
| 101 | Sonnia Amalia |
| 101 | Leonard |
+-----+-----+
16 rows in set (0.070 sec)
```

2. Tampilkan id_nasabah, nama_cabang, jumlah saldo (dalam sisa saldo) dari masing2 id_nasabah dikurangi 75.000 untuk pembayaran SPP. (Kerjakan soal – soal menggunakan Having, Group By, Distinct).

```

Command Prompt - mysql -u root -p
MariaDB [perbankan]> SELECT DISTINCT nasabah_has_rekening.id_nasabahFK, cabang_bank.nama_cabang, SUM(rekening.saldo-75000)as "Sisa Saldo"
-> FROM nasabah_has_rekening JOIN rekening ON rekening.no_rekening=nasabah_has_rekening.no_rekeningFK
-> JOIN cabang_bank ON cabang_bank.kode_cabang=rekening.kode_cabangFK
-> JOIN nasabah ON nasabah.id_nasabah=nasabah_has_rekening.id_nasabahFK
-> GROUP BY id_nasabah HAVING SUM(rekening.saldo>=0);
+-----+-----+-----+
| id_nasabahFK | nama_cabang | Sisa Saldo |
+-----+-----+-----+
| 2 | Bank Rut Unit Surakarta | 675000 |
| 3 | Bank Rut Unit Surakarta | 2925000 |
| 4 | Bank Rut Unit Surakarta | 1350000 |
| 5 | Bank Rut Unit Surakarta | 1200000 |
| 6 | Bank Rut Unit Boyolali | -75000 |
| 8 | Bank Rut Unit Klaten | 300000 |
| 9 | Bank Rut Unit Yogyakarta | 475000 |
| 10 | Bank Rut Unit Boyolali | 5105000 |
+-----+-----+-----+
1 rows in set (0.052 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 memeberikan hak akses pada user. (Creat, Read, Update, Delete masing – masing diberi contoh.).

- Membuat user dengan nama '212'

```

Command Prompt - mysql -u root -p
MariaDB [perbankan]> create user '212'@'localhost' identified by '212';
Query OK, 0 rows affected (0.076 sec)

```

- Memberikan Privileges

```

MariaDB [perbankan]> GRANT CREATE ON perbankan.nasabah to '212'@'localhost';
Query OK, 0 rows affected (0.065 sec)

MariaDB [perbankan]> FLUSH PRIVILEGES
-> ;
Query OK, 0 rows affected (0.001 sec)

MariaDB [perbankan]> GRANT UPDATE ON perbankan.nasabah to '212'@'localhost';
Query OK, 0 rows affected (0.066 sec)

MariaDB [perbankan]> FLUSH PRIVILEGES
-> ;
Query OK, 0 rows affected (0.001 sec)

MariaDB [perbankan]> GRANT DELETE ON perbankan.nasabah to '212'@'localhost';
Query OK, 0 rows affected (0.014 sec)

MariaDB [perbankan]> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.001 sec)

MariaDB [perbankan]> GRANT INSERT ON perbankan.nasabah to '212'@'localhost';
Query OK, 0 rows affected (0.050 sec)

```

- Contoh CRUD dan membuat nasabah baru

```
c:\xampp\mysql\bin>mysql -u 212 -p
Enter password: ***
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 10
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]> select*from nasabah;
ERROR 1142 (42000): SELECT command denied to user '212'@'localhost' for table 'nasabah'
MariaDB [perbankan]> INSERT INTO nasabah VALUES (21,'Bagus Zizou S', 'Jl. Pemuda Klaten 40');
Query OK, 1 row affected (0.095 sec)
```

- Melihat data nasabah

```
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 | Nizar Armando | Jl. Kapitan 23 |
| 12 | Mario Susanto | Jl. Tantowi 55 |
| 13 | Mila Lia | Jl. Bypass 21 |
| 14 | Rifan Anwar | Jl. Pemuda 13 |
| 15 | Yeremia Ano | Jl. Pemuda 18 |
| 16 | Yolanda Mei | Jl. Manahan 56 |
| 17 | Ronald Weho | Jl. Letnan Amil 2 |
| 18 | Roban Aliman | Jl. Waman 43 |
| 19 | Sonnia Amalia | Jl. Remin 3 |
| 20 | Leonard | Jl. Jendral Suhartob 2 |
| 21 | Bagus Zizou S | Jl. Pemuda Klaten 40 |
+-----+-----+-----+
20 rows in set (0.000 sec)
```

- Meng-update user nasabah

```
MariaDB [perbankan]> UPDATE nasabah SET nama_nasabah='Bagus Zizou Satiaji'
-> WHERE id_nasabah='21';
Query OK, 1 row affected (0.130 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 | Nizar Armando | Jl. Kapitan 23 |
| 12 | Mario Susanto | Jl. Tantowi 55 |
| 13 | Mila Lia | Jl. Bypass 21 |
| 14 | Rifan Anwar | Jl. Pemuda 13 |
| 15 | Yeremia Ano | Jl. Pemuda 18 |
| 16 | Yolanda Mei | Jl. Manahan 56 |
| 17 | Ronald Weho | Jl. Letnan Amil 2 |
| 18 | Roban Aliman | Jl. Waman 43 |
| 19 | Sonnia Amalia | Jl. Remin 3 |
| 20 | Leonard | Jl. Jendral Suhartob 2 |
| 21 | Bagus Zizou Satiaji | Jl. Pemuda Klaten 40 |
+-----+-----+-----+
```

- Men-delete user nasabah

```
MariaDB [perbankan]> DELETE FROM nasabah
-> WHERE id_nasabah=21;
Query OK, 1 row affected (0.083 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	Nizar Armando	Jl. Kapitan 23
12	Mario Susanto	Jl. Tantowi 55
13	Mila Lia	Jl. Bypass 21
14	Rifan Anwar	Jl. Pemuda 13
15	Yeremia Ano	Jl. Pemuda 18
16	Yolanda Mei	Jl. Manahan 56
17	Ronald Weho	Jl. Letnan Amil 2
18	Roban Aliman	Jl. Waman 43
19	Sonniah Amalia	Jl. Remin 3
20	Leonard	Jl. Jendral Suhartob 2

```
19 rows in set (0.000 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 akan mengambil mata kuliah A diharuskan revisi ke mata kuliah lain (atau yang sudah terselenggara). (Gunakan SubQuery untuk mendapatkan data-data berikut dari database data kuliah yang telah anda bangun pada modul 4 dan modul 5).

```
MariaDB [kuliah]> UPDATE mahasiswa_mengambil_matakuliah
  -> SET kode_mkFK=(SELECT kode_mk FROM matakuliah WHERE nama_mk LIKE 'kemuh')
  -> WHERE kode_mkFK=(SELECT kode_mk FROM matakuliah WHERE nama_mk LIKE 'ASD');
Query OK, 0 rows affected (0.000 sec)
```

- Sebelum

```
MariaDB [kuliah]> SELECT*FROM mahasiswa_mengambil_matakuliah;
```

nimFK	kode_mkFK
10001	1002
10001	1004
10001	1005
10001	1009
10002	1002
10002	1003
10002	1004
10002	1005
10002	1007
10003	1005
10003	1006
10003	1010
10004	1002
10004	1003
10004	1006
10004	1008
10005	1003
10005	1005
10005	1007
10005	1008
10006	1003
10006	1009
10007	1001
10007	1002
10007	1004
10008	1003
10008	1008
10008	1009
10009	1001
10009	1005
10009	1010
10010	1001
10010	1003
10010	1004

- Sesudah

```
Command Prompt - mysql -u root -p

+----+-----+
| nimFK | kode_mkFK |
+----+-----+
| 10001 | 1002 |
| 10001 | 1004 |
| 10001 | 1005 |
| 10001 | 1009 |
| 10002 | 1002 |
| 10002 | 1003 |
| 10002 | 1004 |
| 10002 | 1005 |
| 10002 | 1007 |
| 10003 | 1005 |
| 10003 | 1006 |
| 10003 | 1010 |
| 10004 | 1002 |
| 10004 | 1003 |
| 10004 | 1006 |
| 10004 | 1008 |
| 10005 | 1003 |
| 10005 | 1005 |
| 10005 | 1007 |
| 10005 | 1008 |
| 10006 | 1003 |
| 10006 | 1009 |
| 10007 | 1001 |
| 10007 | 1002 |
| 10007 | 1004 |
| 10008 | 1003 |
| 10008 | 1008 |
| 10008 | 1009 |
+----+-----+
| 10009 | 1001 |
| 10009 | 1005 |
| 10009 | 1010 |
| 10010 | 1001 |
| 10010 | 1003 |
| 10010 | 1004 |
+----+-----+
4 rows in set (0.000 sec)
```