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No 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)

```
MariaDB [perbankan]> SELECT DISTINCT rekening.no_rekening, nasabah.nama_nasabah FROM transaksi RIGHT OUTER JOIN nasabah
ON transaksi.id_nasabahFK=nasabah.id_nasabah NATURAL JOIN rekening RIGHT OUTER JOIN nasabah_has_rekening USING(no_rekeningFK) WHERE tanggal > "2009-12-01" GROUP BY id_nasabah ORDER BY id_nasabah;
```

no_rekening	nama_nasabah
101	maryati
101	kartika padmasari
101	budi eko prayogo
101	canka lokananta

4 rows in set (0.00 sec)

```
MariaDB [perbankan]> SELECT DISTINCT rekening.no_rekening, nasabah.nama_nasabah FROM transaksi INNER JOIN nasabah ON transaksi.id_nasabahFK=nasabah.id_nasabah NATURAL JOIN rekening INNER JOIN nasabah_has_rekening USING(no_rekeningFK) WHERE tanggal > "2009-12-01" GROUP BY id_nasabah ORDER BY id_nasabah;
```

no_rekening	nama_nasabah
101	maryati
101	kartika padmasari
101	budi eko prayogo
101	canka lokananta

4 rows in set (0.00 sec)

No 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)

```
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 nasabah_has_rekening.no_rekeningFK=rekening.no_rekening JOIN cabang_bank ON rekening.kode_cabangFK=cabang_bank.kode_cabang GROUP BY id_nasabahFK HAVING SUM(rekening.saldo >0);
```

id_nasabahFK	nama_cabang	Sisa Saldo
2	bank rut unit surakarta	675000
3	bank rut unit surakarta	350000
4	bank rut unit surakarta	450000
5	bank rut unit surakarta	300000
8	Bank Rut Unit Klaten	300000
9	Bank Rut Unit Yogyakarta	475000
10	Bank Rut Unit Boyolali	605000

7 rows in set (0.14 sec)

No 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. (Creat, Read, Update, Delete masing – masing diberi contoh.).

Membuat user dengan nama 3 digit nim terakhir

```
MariaDB [mysql]> CREATE User '004'@'localhost' IDENTIFIED BY '004'
-> ;
Query OK, 0 rows affected (0.13 sec)
```

```
C:\xampp\mysql\bin>mysql -u 004 -p
Enter password:
ERROR 1045 (28000): Access denied for user '004'@'localhost' (using password: NO)

C:\xampp\mysql\bin>mysql -u 004 -p
Enter password: ***
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 292
Server version: 10.1.36-MariaDB mariadb.org binary distribution

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Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

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

Memberi privilege pada user

```
MariaDB [mysql]> GRANT CREATE ON perbankan.nasabah TO '004'@'localhost';
Query OK, 0 rows affected (0.19 sec)

MariaDB [mysql]> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.13 sec)
```

cmd C:\Windows\system32\cmd.exe - mysql -u root -p

```
MariaDB [mysql]> GRANT INSERT ON perbankan.nasabah TO '004'@'localhost';
Query OK, 0 rows affected (0.00 sec)
```

```
MariaDB [mysql]> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.00 sec)
```

```
MariaDB [mysql]> GRANT UPDATE ON perbankan.nasabah TO '004'@'localhost';
Query OK, 0 rows affected (0.00 sec)
```

```
MariaDB [mysql]> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.00 sec)
```

```
MariaDB [mysql]> GRANT DELETE ON perbankan.nasabah TO '004'@'localhost';
Query OK, 0 rows affected (0.00 sec)
```

```
MariaDB [mysql]> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.00 sec)
```

```
MariaDB [mysql]> GRANT SELECT ON perbankan.nasabah TO '004'@'localhost';
Query OK, 0 rows affected (0.06 sec)
```

```
MariaDB [mysql]> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.00 sec)
```

Masing –masing contoh CRUD

Create/insert

```
MariaDB [perbankan]> INSERT INTO nasabah VALUES (444, "kevin", "Sukoharjo");
Query OK, 1 row affected (0.15 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 1
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
444	kevin	Sukoharjo

10 rows in set (0.00 sec)

```
MariaDB [perbankan]> INSERT INTO cabang_bank VALUES ("BR", "bank rut", "Sukoharjo");
ERROR 1142 (42000): INSERT command denied to user '004'@'localhost' for table 'cabang_bank'
```

Read/select

```
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 1
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
12	kevin	Sukoharjo

```
10 rows in set (0.00 sec)
```

```
MariaDB [perbankan]> SELECT * FROM transaksi;
```

ERROR 1142 (42000): SELECT command denied to user '004'@'localhost' for table 'transaksi'

Update

```
MariaDB [perbankan]> UPDATE nasabah SET nama_nasabah="kevin hansa wardhana" WHERE id_nasabah=444;
```

Query OK, 1 row affected (0.11 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 1
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
444	kevin hansa wardhana	Sukoharjo

```
10 rows in set (0.00 sec)
```

```
MariaDB [perbankan]> UPDATE cabang_bank SET nama_cabang="Bank Rut Unit Boyolali" WHERE kode_cabang="BRUM";
```

ERROR 1142 (42000): UPDATE command denied to user '004'@'localhost' for table 'cabang_bank'

Delete

```
MariaDB [perbankan]> DELETE FROM nasabah WHERE id_nasabah=444;
Query OK, 1 row affected (0.11 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 1 |
| 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 |
+-----+-----+-----+
9 rows in set (0.00 sec)

MariaDB [perbankan]> DELETE FROM cabang_bank WHERE kode_cabang="BRUM";
ERROR 1142 (42000): DELETE command denied to user '004'@'localhost' for table 'cabang_bank'
```

No 4. subquery

```
MariaDB [perkuliahan]> UPDATE mahasiswa_has_mata_kuliah SET mata_kuliah_kode_matkul='UMS40599' WHERE mata_kuliah_kode_ma
tkul=(SELECT kode_matkul FROM mata_kuliah WHERE kode_matkul='TIF40510');
Query OK, 4 rows affected (0.12 sec)
Rows matched: 4 Changed: 4 Warnings: 0

MariaDB [perkuliahan]> SELECT * FROM mahasiswa_has_mata_kuliah;
+-----+-----+
| mata_kuliah_kode_matkul | mahasiswa_NIM |
+-----+-----+
| 4444 | 130 |
| TIF00000 | 120 |
| TIF40501 | 121 |
| TIF40513 | 129 |
| UMS40503 | 123 |
| UMS40511 | 127 |
| UMS40512 | 128 |
| UMS40599 | 122 |
| UMS40599 | 124 |
| UMS40599 | 125 |
| UMS40599 | 126 |
+-----+-----+
11 rows in set (0.00 sec)
```