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Modul 10

tugas

1. Menampilkan jumlah transaksi terbesar

```
MariaDB [perbankan]> select max(transaksi.jumlah) from (select jumlah from transaksi) transaksi;
+-----+
| max(transaksi.jumlah) |
+-----+
|          13200000 |
+-----+
1 row in set (0.04 sec)
```

2. Menampilkan jumlah transaksi terkecil.

```
MariaDB [perbankan]> select min(transaksi.jumlah) from (select jumlah from transaksi) transaksi;
+-----+
| min(transaksi.jumlah) |
+-----+
|           20000 |
+-----+
1 row in set (0.00 sec)
```

3. Menampilkan nasabah dengan jumlah transaksi terbesar

```
MariaDB [perbankan]> select nasabah.id_nasabah,nasabah.nama_nasabah,transaksi.jumlah from transaksi JOIN nasabah on nasabah.id_nasabah=transaksi.id_nasabahFK where transaksi.jumlah IN (select max(jumlah) from transaksi);
+-----+-----+-----+
| id_nasabah | nama_nasabah | jumlah |
+-----+-----+-----+
|          16 | Ayu          | 13200000 |
+-----+-----+-----+
1 row in set (0.00 sec)

MariaDB [perbankan]>
```

4. Menampilkan cabang bank yang tidak memiliki nomor rekening

```
MariaDB [perbankan]> select * from cabang_bank where cabang_bank.kode_cabang NOT IN (select rekening.kode_cabangFK from rekening);
+-----+-----+-----+
| kode_cabang | nama_cabang      | alamat_cabang |
+-----+-----+-----+
| BRUD        | Bank Rut Unit Demak | Jl. Wali 44   |
| BRUSU       | Bank Rut Unit Subang | Jl. Cicaheum 10 |
+-----+-----+-----+
2 rows in set (0.00 sec)
```

5. Menampilkan nomor rekening dengan saldo diatas rata-rata

```
MariaDB [perbankan]> select no_rekening, saldo from rekening where saldo > (select AVG(saldo) from rekening);
+-----+-----+
| no_rekening | saldo |
+-----+-----+
|          103 | 750000 |
|          104 | 900000 |
|          105 | 2000000 |
|          106 | 3000000 |
|          107 | 1000000 |
|          108 | 5000000 |
+-----+-----+
6 rows in set (0.00 sec)
```

6. Soal mandiri

a. Saldo terkecil

```
MariaDB [perbankan]> select min(rekening.saldo) from (select saldo from rekening) rekening;
+-----+
| min(rekening.saldo) |
+-----+
| 0 |
+-----+
1 row in set (0.00 sec)
```

b. Saldo terbesar

```
MariaDB [perbankan]> select max(rekening.saldo) from (select saldo from rekening) rekening;
+-----+
| max(rekening.saldo) |
+-----+
| 5000000 |
+-----+
1 row in set (0.00 sec)
```

c. Rekening cabang brus

```
MariaDB [perbankan]> select no_rekening from rekening where kode_cabangFK IN (select kode_cabangFK from rekening where k
ode_cabangFK='BRUS');
+-----+
| no_rekening |
+-----+
| 101 |
| 102 |
| 103 |
| 106 |
| 107 |
+-----+
5 rows in set (0.00 sec)
```

d. Transaksi debit

```
MariaDB [perbankan]> select nasabah.nama_nasabah from nasabah where nasabah.id_nasabah IN (select transaksi.id_nasabahFK
from transaksi where jenis_transaksi='debit');
+-----+
| nama_nasabah |
+-----+
| Sutopo |
| Maryati |
| Suparman |
| Kartika Padmasari |
| Budi Eko Prayogo |
| Canka Lokananta |
| Budi Murtono |
| Amin |
| Amir |
| Apip |
| Ajeng |
| Ayu |
| Aisyah |
| Amar |
+-----+
14 rows in set (0.00 sec)
```

e. Transaksi tanggal 10 nov

```
MariaDB [perbankan]> select * from nasabah where nasabah.id_nasabah IN (select transaksi.id_nasabahFK from transaksi whe
re tanggal='2009-11-10');
+-----+-----+-----+
| id_nasabah | nama_nasabah | alamat_nasabah |
+-----+-----+-----+
| 2 | Maryati | Jl. MT. Haryono 31 |
| 3 | Suparman | Jl. Hasanudin 81 |
+-----+-----+-----+
2 rows in set (0.00 sec)
```

7. Soal dosen

- a. Ambil salah satu mata kuliah. Tampilkan daftar mahasiswa yang tidak mengambil mata kuliah tersebut.

```
MariaDB [perkuliahan]> SELECT *FROM mahasiswa
-> WHERE mahasiswa.NIM
-> NOT IN (SELECT mahasiswa_has_mata_kuliah.NIMFK from
mahasiswa_has_mata_kuliah WHERE kode_matkulFK='MA11');
+-----+-----+-----+
| NIM | nama_mahasiswa | alamat_mahasiswa |
+-----+-----+-----+
| 13 | Dimas          | Karanganyar       |
| 14 | Rozaq          | Sukoharjo         |
| 16 | Vian           | Wonogiri          |
| 18 | Alifa          | Sukoharjo         |
| 19 | Atifa          | Karanganyar       |
+-----+-----+-----+
5 rows in set (0.041 sec)
```

- b. Tampilkan daftar mahasiswa yang mengambil semua mata kuliah yang diampu oleh salah satu dosen

```
MariaDB [perkuliahan]> SELECT * FROM mahasiswa
-> WHERE mahasiswa.NIM
-> IN (SELECT mahasiswa_has_dosen.NIMFK from mahasiswa_has_dosen
WHERE id_dosenFK=1111);
+-----+-----+-----+
| NIM | nama_mahasiswa | alamat_mahasiswa |
+-----+-----+-----+
| 10 | Indah          | Sukoharjo         |
| 11 | Syaifunnisa    | Klaten            |
| 12 | Kintari        | Boyolali          |
| 15 | Sinta          | Klaten            |
| 17 | Andre          | Wonogiri          |
| 20 | Denis          | Yogyakarta        |
+-----+-----+-----+
6 rows in set (0.001 sec)
```

- c. Lakukan update data menggunakan sub query

```
MariaDB [perkuliahan]> SELECT* FROM mahasiswa_has_mata_kuliah;
```

kode_matkulFK	NIMFK
MA11	10
MA11	11
MA11	12
MA11	15
MA11	17
MA11	20
MA13	11
MA14	15
MA15	15
MA16	13
MA17	16
MA18	15
MA19	17
MA20	20

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

```
MariaDB [perkuliahan]> UPDATE mahasiswa_has_mata_kuliah set kode_matkulFK  
='MA12' WHERE kode_matkulFK=(SELECT kode_matkul from mata_kuliah WHERE k  
ode_matkul='MA11');
```

```
Query OK, 6 rows affected (0.085 sec)
```

```
Rows matched: 6 Changed: 6 Warnings: 0
```

```
MariaDB [perkuliahan]> SELECT* FROM mahasiswa_has_mata_kuliah;
```

kode_matkulFK	NIMFK
MA12	10
MA12	11
MA12	12
MA12	15
MA12	17
MA12	20
MA13	11
MA14	15
MA15	15
MA16	13
MA17	16
MA18	15
MA19	17
MA20	20

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

- d. Lakukan update pada data menggunakan sub query

```
MariaDB [perkuliahan]> SELECT* FROM mata_kuliah;
+-----+-----+-----+
| kode_matkul | id_dosenFK | nama_matkul |
+-----+-----+-----+
| MA11        | 1111       | PBO         |
| MA12        | 5555       | SISDIG      |
| MA13        | 3333       | SO          |
| MA14        | 4444       | PANCASILA   |
| MA15        | 5555       | ALGOSTRUK   |
| MA16        | 6666       | SBD         |
| MA17        | 7777       | RPL         |
| MA18        | 8888       | Jaringan Komputer |
| MA19        | 1111       | Kalkulus    |
| MA20        | 2222       | Metode Numerik |
+-----+-----+-----+
10 rows in set (0.001 sec)

MariaDB [perkuliahan]> UPDATE mata_kuliah set id_dosenFK =5555 WHERE
id_dosenFK=(SELECT id_dosen from dosen where id_dosen=1111);
Query OK, 2 rows affected (0.073 sec)
Rows matched: 2  Changed: 2  Warnings: 0

MariaDB [perkuliahan]> SELECT* FROM mata_kuliah;
+-----+-----+-----+
| kode_matkul | id_dosenFK | nama_matkul |
+-----+-----+-----+
| MA11        | 5555       | PBO         |
| MA12        | 5555       | SISDIG      |
| MA13        | 3333       | SO          |
| MA14        | 4444       | PANCASILA   |
| MA15        | 5555       | ALGOSTRUK   |
| MA16        | 6666       | SBD         |
| MA17        | 7777       | RPL         |
| MA18        | 8888       | Jaringan Komputer |
| MA19        | 5555       | Kalkulus    |
| MA20        | 2222       | Metode Numerik |
+-----+-----+-----+
10 rows in set (0.000 sec)
```

- e. Mata kuliah A tidak memenuhi standar kebijakan prodi akan pengadaan/pengelenggaraan kelas karena <10 mahasiswa disebabkan kurang minatnya mahasiswa akan mata kuliah A. Sehingga mahasiswa yang mengambil mata kuliah A diharuskan revisi ke mata kuliah lain

(atau yang sudah terselenggara).

```
MariaDB [perkuliahan]> select * from mahasiswa_has_mata_kuliah;
```

kode_matkulFK	NIMFK
MA12	10
MA12	11
MA12	12
MA12	15
MA12	17
MA13	11
MA14	15
MA15	15
MA16	13
MA17	16
MA18	15
MA19	17
MA20	20

```
13 rows in set (0.062 sec)
```

```
MariaDB [perkuliahan]> INSERT INTO mahasiswa_has_mata_kuliah VALUE ('MA12',20);
```

```
Query OK, 1 row affected (0.067 sec)
```

```
MariaDB [perkuliahan]> DELETE from mahasiswa_has_mata_kuliah  
-> WHERE kode_matkulFK=(SELECT kode_matkulFK from mahasiswa_has_mata_kuliah  
where kode_matkulFK='MA20' AND NIMFK=20);
```

```
Query OK, 1 row affected (0.340 sec)
```

```
MariaDB [perkuliahan]> SELECT * from mahasiswa_has_mata_kuliah;
```

kode_matkulFK	NIMFK
MA12	10
MA12	11
MA12	12
MA12	15
MA12	17
MA12	20
MA13	11
MA14	15
MA15	15
MA16	13
MA17	16
MA18	15
MA19	17

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