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Prak Sistem Basis Data

## Modul 10 SubQuery

### LATIHAN

1. Tampilkan detail data nasabah yang pernah melakukan transaksi kredit

```
MariaDB [perbankan]> SELECT*FROM nasabah WHERE nasabah.id_nasabah IN (SELECT DISTINCT transaksi.id_nasabahFK from transaksi WHERE jenis_transaksi='kredit');
Empty set (0.714 sec)
```

2. Tampilkan detail nasabah yang tidak pernah melakukan segala jenis transaksi

```
MariaDB [perbankan]> SELECT*FROM nasabah WHERE nasabah.id_nasabah NOT IN (SELECT DISTINCT transaksi.id_nasabahFK from transaksi);
+-----+-----+-----+-----+
| id_nasabah | nama_perbankan | alamat_nasabah | ttl_nasabah |
+-----+-----+-----+-----+
| 1 | Sutopo | Jln. Jenderal Sudirman No.12 Semarang | 1980-08-31 |
| 2 | Maryati | Jln.MT Haryono No.31 Pati | 1983-09-13 |
| 3 | Suparman | Jln. Hasanudin No.81 Makassar | 1979-12-23 |
| 4 | Kartika Padmasari | Jln.Manggis No.15 Klaten | 1989-02-13 |
| 5 | Budi Eko Prayogo | Jln.Kantil No.30 Sragen | 1991-04-10 |
| 6 | Satria Eka Jaya | Jln.Slamet Riyadi No.45 Solo | 1992-08-11 |
| 8 | Sari Murti | Jln.Pangandaran No.11 Bandung | 1994-10-04 |
| 9 | Canka Lokananta | Jln.Tidar No.86 Magelang | 1998-05-31 |
| 10 | Budi Martono | Jln.Merak No.22 Klaten | 1993-04-20 |
+-----+-----+-----+-----+
9 rows in set (0.107 sec)
```

3. Tampilkan cabang bank yang memiliki rata-rata saldo paling besar untuk seluruh rekening dalam cabang tersebut

```
MariaDB [perbankan]> SELECT cabang_bank.kode_cabang, cabang_bank.nama_cabang, AVG(rekening.saldo) as rata2 FROM cabang_bank, rekening WHERE cabang_bank.kode_cabang=rekening.kode_cabangFK GROUP BY cabang_bank.kode_cabang HAVING rata2 >= ALL(select AVG(saldo) FROM rekening GROUP BY kode_cabangFK);
+-----+-----+
| kode_cabang | nama_cabang | rata2 |
+-----+-----+
| BRUB | Bank Ria Unit Boyolali | 1850000.0000 |
+-----+-----+
1 row in set (0.114 sec)
```

4. Tampilkan data transaksi yang melibatkan jumlah uang lebih besar dari rata-rata nilai keseluruhan transaksi

```
MariaDB [perbankan]> SELECT*FROM transaksi WHERE jumlah>(SELECT AVG(jumlah) FROM transaksi);
+-----+-----+-----+-----+-----+-----+
| no_transaksi | id_nasabahFK | no_rekeningFK | jenis_transaksi | tanggal | jumlah |
+-----+-----+-----+-----+-----+-----+
| 6 | 104 | 1 | kredit | 2009-11-15 00:00:00 | 200000 |
| 13 | 107 | 4 | kredit | 2009-11-20 00:00:00 | 200000 |
| 16 | 101 | 4 | kredit | 2009-11-22 00:00:00 | 200000 |
| 21 | 103 | 2 | kredit | 2009-11-28 00:00:00 | 2500000 |
| 23 | 102 | 5 | debit | 2009-11-30 00:00:00 | 200000 |
| 28 | 102 | 5 | kredit | 2009-12-05 00:00:00 | 200000 |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.032 sec)
```

## TUGAS

- Menampilkan jumlah transaksi terbesar

```
MariaDB [perbankan]> SELECT DISTINCT jumlah FROM transaksi WHERE jumlah >= all (SELECT MAX(jumlah) from transaksi);
+-----+
| jumlah |
+-----+
| 2500000 |
+-----+
1 row in set (0.169 sec)
```

- Menampilkan jumlah transaksi terkecil

```
MariaDB [perbankan]> SELECT DISTINCT jumlah FROM transaksi WHERE jumlah <= all (SELECT MIN(jumlah) from transaksi);
+-----+
| jumlah |
+-----+
| 20000 |
+-----+
1 row in set (0.001 sec)
```

- Menampilkan nasabah dengan jumlah transaksi terbesar

```
MariaDB [perbankan]> SELECT DISTINCT nasabah.nama_perbankan, transaksi.jumlah FROM transaksi, nasabah WHERE jumlah >= al
l (SELECT MAX(jumlah) from transaksi);
+-----+-----+
| nama_perbankan | jumlah |
+-----+-----+
| Sutopo         | 2500000 |
| Maryati        | 2500000 |
| Suparman       | 2500000 |
| Kartika Padmasari | 2500000 |
| Budi Eko Prayogo | 2500000 |
| Satria Eka Jaya | 2500000 |
| Sari Murti     | 2500000 |
| Canka Lokananta | 2500000 |
| Budi Martono   | 2500000 |
+-----+-----+
9 rows in set (0.055 sec)
```

- Menampilkan cabang yang tidak memiliki rekening

```
MariaDB [perbankan]> SELECT DISTINCT cabang_bank.nama_cabang FROM cabang_bank WHERE cabang_bank.kode_cabang not in (SELE
CT DISTINCT rekening.kode_cabangFK FROM rekening);
+-----+
| nama_cabang |
+-----+
| Bank Rut Unit Wonogiri |
+-----+
1 row in set (0.147 sec)
```

- Menampilkan nomor rekening dengan saldo di atas rata2

```
MariaDB [perbankan]> SELECT rekening.no_rekening, rekening.saldo FROM rekening WHERE saldo > (SELECT AVG(saldo) from rek
ening);
+-----+-----+
| no_rekening | saldo |
+-----+-----+
|      105 | 2000000 |
|      106 | 3000000 |
|      108 | 5000000 |
|     113 | 2550000 |
+-----+-----+
4 rows in set (0.037 sec)
```

- Buat 5 soal sesuai versi anda

- Menampilkan nasabah dengan jumlah saldo terbesar.

```
MariaDB [perbankan]> SELECT DISTINCT nasabah.nama_perbankan, rekening.saldo FROM rekening, nasabah WHERE saldo >= all (SELECT MAX(saldo) FROM rekening);
+-----+-----+
| nama_perbankan | saldo |
+-----+-----+
| Sutopo          | 5000000 |
| Maryati          | 5000000 |
| Suparman         | 5000000 |
| Kartika Padmasari | 5000000 |
| Budi Eko Prayogo | 5000000 |
| Satria Eka Jaya  | 5000000 |
| Sari Murti        | 5000000 |
| Canka Lokananta   | 5000000 |
| Budi Martono      | 5000000 |
+-----+-----+
9 rows in set (0.001 sec)
```

- b. Menampilkan nasabah dengan jumlah saldo terkecil.

```
MariaDB [perbankan]> SELECT DISTINCT nasabah.nama_perbankan, rekening.saldo FROM rekening, nasabah WHERE saldo <= all(SELECT min(saldo) FROM rekening);
+-----+-----+
| nama_perbankan | saldo |
+-----+-----+
| Sutopo          | 50000  |
| Maryati          | 50000  |
| Suparman         | 50000  |
| Kartika Padmasari | 50000  |
| Budi Eko Prayogo | 50000  |
| Satria Eka Jaya  | 50000  |
| Sari Murti        | 50000  |
| Canka Lokananta   | 50000  |
| Budi Martono      | 50000  |
+-----+-----+
9 rows in set (0.001 sec)
```

- c. Menampilkan saldo nasabah dengan jumlah rata2 terbesar.

```
MariaDB [perbankan]> SELECT nasabah.nama_perbankan, rekening.saldo FROM rekening, nasabah WHERE saldo > (select AVG(saldo) FROM rekening);
+-----+-----+
| nama_perbankan | saldo |
+-----+-----+
| Sutopo          | 2000000 |
| Maryati          | 2000000 |
| Suparman         | 2000000 |
| Kartika Padmasari | 2000000 |
| Budi Eko Prayogo | 2000000 |
| Satria Eka Jaya  | 2000000 |
| Sari Murti        | 2000000 |
| Canka Lokananta   | 2000000 |
| Budi Martono      | 2000000 |
| Sutopo          | 3000000 |
| Maryati          | 3000000 |
| Suparman         | 3000000 |
| Kartika Padmasari | 3000000 |
| Budi Eko Prayogo | 3000000 |
| Satria Eka Jaya  | 3000000 |
| Sari Murti        | 3000000 |
| Canka Lokananta   | 3000000 |
| Budi Martono      | 3000000 |
| Sutopo          | 5000000 |
| Maryati          | 5000000 |
| Suparman         | 5000000 |
| Kartika Padmasari | 5000000 |
| Budi Eko Prayogo | 5000000 |
| Satria Eka Jaya  | 5000000 |
| Sari Murti        | 5000000 |
| Canka Lokananta   | 5000000 |
| Budi Martono      | 5000000 |
| Sutopo          | 2550000 |
| Maryati          | 2550000 |
| Suparman         | 2550000 |
| Kartika Padmasari | 2550000 |
| Budi Eko Prayogo | 2550000 |
| Satria Eka Jaya  | 2550000 |
| Sari Murti        | 2550000 |
| Canka Lokananta   | 2550000 |
| Budi Martono      | 2550000 |
+-----+-----+
```

- d. Menampilkan saldo nasabah dengan jumlah rata2 terkecil.

```
MariaDB [perbankan]> SELECT nasabah.nama_perbankan, rekening.saldo FROM rekening, nasabah WHERE saldo < (select AVG(saldo) FROM rekening);
+-----+-----+
| nama_perbankan | saldo |
+-----+-----+
| Sutopo          | 500000
| Maryati          | 500000
| Suparman         | 500000
| Kartika Padmasari | 500000
| Budi Eko Prayogo | 500000
| Satria Eka Jaya  | 500000
| Sari Murti        | 500000
| Canka Lokananta   | 500000
| Budi Martono       | 500000
| Sutopo          | 350000
| Maryati          | 350000
| Suparman         | 350000
| Kartika Padmasari | 350000
| Budi Eko Prayogo | 350000
| Satria Eka Jaya  | 350000
+-----+-----+
Canka Lokananta | 350000
Budi Martono     | 350000
Sutopo          | 750000
Maryati          | 750000
Suparman         | 750000
Kartika Padmasari | 750000
Budi Eko Prayogo | 750000
Satria Eka Jaya  | 750000
Sari Murti        | 750000
Canka Lokananta   | 750000
Budi Martono       | 750000
Sutopo          | 900000
Maryati          | 900000
Suparman         | 900000
Kartika Padmasari | 900000
Budi Eko Prayogo | 900000
Satria Eka Jaya  | 900000
Sari Murti        | 900000
Canka Lokananta   | 900000
Budi Martono       | 900000
Sutopo          | 1000000
Maryati          | 1000000
Suparman         | 1000000
Kartika Padmasari | 1000000
Budi Eko Prayogo | 1000000
Satria Eka Jaya  | 1000000
Sari Murti        | 1000000
Canka Lokananta   | 1000000
Budi Martono       | 1000000
```

- e. Menampilkan cabang yang memiliki rekening.

```
MariaDB [perbankan]> SELECT DISTINCT cabang_bank.nama_cabang FROM cabang_bank WHERE cabang_bank.kode_cabang IN (SELECT DISTINCT rekening.kode_cabangFK from rekening);
+-----+
| nama_cabang |
+-----+
| Bank Rut Unit Boyolali |
| Bank Rut Unit Klaten    |
| Bank Rut Unit Surakarta  |
| Bank Rut Unit Yogyakarta |
+-----+
4 rows in set (0.094 sec)
```