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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 Rut 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 | 250000 |
| 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

1. 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)
```

2. Menampilkan jumlah transaksi terkecil

```
MariaDB [perbankan]> SELECT DISTINCT jumlah FROM transaksi WHERE jumlah <= all (SELECT MIN(jumlah) from transaksi);
+-----+
| jumlah |
+-----+
| 200000  |
+-----+
1 row in set (0.001 sec)
```

3. Menampilkan nasabah dengan jumlah transaksi terbesar

```
MariaDB [perbankan]> SELECT DISTINCT nasabah.nama_perbankan, transaksi.jumlah FROM transaksi, nasabah WHERE jumlah >= all (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)
```

4. Menampilkan cabang yang tidak memiliki rekening

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

5. Menampilkan nomor rekening dengan saldo di atas rata2

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

6. Buat 5 soal sesuai versi anda

- a. 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         | 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 |
+-----+-----+
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)