PRAKTIKUM SISTEM BASIS DATA

MODUL 8

Nama : Dewantara Surya Jaya

NIM   : L200180013

5)

```
MariaDB [perbankan]> SELECT transaksi.tanggal,transaksi.jenis_transaksi,transaksi.jumlah
    -> FROM nasabah,transaksi WHERE nasabah.id_nasabah = transaksi.id_nasabah AND nasabah.
    -> nama_nasabah IN ('Sutopo','Canka Lokananta') ORDER BY transaksi.tanggal
    -> ;
+---------------------+-----------------+--------+
| tanggal             | jenis_transaksi | jumlah |
+---------------------+-----------------+--------+
| 2009-11-15 00:00:00 | kredit          | 200000 |
| 2009-11-15 00:00:00 | kredit          | 150000 |
| 2009-11-19 00:00:00 | debit           |  50000 |
| 2009-11-22 00:00:00 | kredit          | 100000 |
| 2009-12-01 00:00:00 | debit           |  50000 |
| 2009-12-06 00:00:00 | debit           |  20000 |
+---------------------+-----------------+--------+
6 rows in set (0.263 sec)
```

6)

```
MariaDB [perbankan]> SELECT transaksi.tanggal,nasabah.nama_nasabah,transaksi.jenis_transaksi,
    -> transaksi.jumlah FROM nasabah,transaksi WHERE transaksi.tanggal BETWEEN '2009-11-15'
    -> AND '2009-11-20'AND nasabah.id_nasabah = transaksi.id_nasabah ORDER BY transaksi.tanggal,
    -> nasabah.nama_nasabah;
+---------------------+------------------+-----------------+--------+
| tanggal             | nama_nasabah     | jenis_transaksi | jumlah |
+---------------------+------------------+-----------------+--------+
| 2009-11-15 00:00:00 | Canka Lokananta  | kredit          | 150000 |
| 2009-11-15 00:00:00 | Sutopo           | kredit          | 200000 |
| 2009-11-16 00:00:00 | Budi Eko Prayogo | debit           |  20000 |
| 2009-11-18 00:00:00 | Suparman         | kredit          |  50000 |
| 2009-11-19 00:00:00 | Kartika Padmasari| debit           | 100000 |
| 2009-11-19 00:00:00 | Maryati          | debit           | 100000 |
| 2009-11-19 00:00:00 | Sutopo           | debit           |  50000 |
| 2009-11-20 00:00:00 | Kartika Padmasari| kredit          | 200000 |
+---------------------+------------------+-----------------+--------+
8 rows in set (0.043 sec)
```

7)

```
MariaDB [perbankan]> SELECT transaksi.jenis_transaksi AS "Jenis Transaksi",SUM(jumlah) AS
    -> "Jumlah (Rp)" FROM transaksi GROUP BY transaksi.jenis_transaksi ORDER BY transaksi.
    -> jenis_transaksi;
+-----------------+-------------+
| Jenis Transaksi | Jumlah (Rp) |
+-----------------+-------------+
| debit           |      930000 |
| kredit          |     1420000 |
+-----------------+-------------+
2 rows in set (0.060 sec)
```

8)

```
MariaDB [perbankan]> SELECT transaksi.jenis_transaksi AS "Jenis Transaksi",MAX(jumlah) AS
    -> "Transaksi Terbesar",MIN(jumlah) AS "Transaksi Terkecil" FROM transaksi GROUP BY
    -> transaksi.jenis_transaksi ORDER BY transaksi.jenis_transaksi;
+-----------------+--------------------+--------------------+
| Jenis Transaksi | Transaksi Terbesar | Transaksi Terkecil |
+-----------------+--------------------+--------------------+
| debit           |             100000 |              20000 |
| kredit          |             200000 |              20000 |
+-----------------+--------------------+--------------------+
2 rows in set (0.042 sec)
```

9)

```
MariaDB [perbankan]> SELECT jenis_transaksi AS "Jenis Transaksi",SUM(jumlah) AS "Jumlah (Rp)",
    -> COUNT(jumlah) AS "Jumlah Transaksi" FROM transaksi WHERE tanggal BETWEEN '2009-11-1'
    -> AND '2009-11-30' GROUP BY transaksi.jenis_transaksi ORDER BY transaksi.jenis_transaksi;
+-----------------+-------------+------------------+
| Jenis Transaksi | Jumlah (Rp) | Jumlah Transaksi |
+-----------------+-------------+------------------+
| debit           |      670000 |               12 |
| kredit          |     1120000 |               11 |
+-----------------+-------------+------------------+
2 rows in set (0.002 sec)
```

Tugas

1) SELECT transaksi.jenis_transaksi,SUM(transaksi.jumlah) AS "Jumlah (Rp)",COUNT(transaksi.jumlah) AS "Total Transaksi" FROM nasabah,transaksi WHERE nasabah.id_nasabah = transaksi.id_nasabah AND nasabah.nama_nasabah = 'Kartika Padmasari';

```
Kartika Padmasari'' at line 3
MariaDB [perbankan]> SELECT transaksi.jenis_transaksi,SUM(transaksi.jumlah) AS "Jumlah (Rp)",
    -> COUNT(transaksi.jumlah) AS "Total Transaksi" FROM nasabah,transaksi WHERE nasabah.id_nasabah
    -> = transaksi.id_nasabah AND nasabah.nama_nasabah = 'Kartika Padmasari';
+-----------------+-------------+-----------------+
| jenis_transaksi | Jumlah (Rp) | Total Transaksi |
+-----------------+-------------+-----------------+
| kredit          |      390000 |               5 |
+-----------------+-------------+-----------------+
 row in set (0.002 sec)
```

2) SELECT nama_nasabah,SUM(saldo) AS "Jumlah Saldo (Rp)"
   FROM nasabah JOIN transaksi
   ON nasabah.id_nasabah = transaksi.id_nasabah
   JOIN rekening
   USING (no_rekening)
   WHERE nama_nasabah = 'Maryati';

```
MariaDB [perbankan]> SELECT nama_nasabah,SUM(saldo) AS "Jumlah Saldo (Rp)"
    -> FROM nasabah JOIN transaksi
    -> ON nasabah.id_nasabah = transaksi.id_nasabah
    -> JOIN rekening
    -> USING(no_rekening)
    -> WHERE nama_nasabah = 'Maryati';
+--------------+-------------------+
| nama_nasabah | Jumlah Saldo (Rp) |
+--------------+-------------------+
| Maryati      |           4500000 |
+--------------+-------------------+
1 row in set (0.081 sec)
```

3) SELECT kode_cabang,COUNT(no_rekening) AS "Jumlah Transaksi"

FROM rekening JOIN transaksi

USING (no_rekening)

GROUP BY kode_cabang

ORDER BY kode_cabang;

```
MariaDB [perbankan]> SELECT kode_cabang,COUNT(no_rekening) AS "Jumlah Transaksi"
    -> FROM rekening JOIN transaksi
    -> USING(no_rekening)
    -> GROUP BY (kode_cabang)
    -> ORDER BY (kode_cabang);
+-------------+------------------+
| kode_cabang | Jumlah Transaksi |
+-------------+------------------+
| BRUB        |                2 |
| BRUM        |                8 |
| BRUS        |               18 |
| BRUY        |                2 |
+-------------+------------------+
4 rows in set (0.003 sec)
```

4) SELECT nama_nasabah,SUM(saldo) AS "Jumlah Saldo (Rp)"

FROM nasabah NATURAL JOIN transaksi

NATURAL JOIN rekening

GROUP BY nama_nasabah

HAVING SUM(saldo) BETWEEN 500000 AND 2000000

ORDER BY nama_nasabah;

```
MariaDB [perbankan]> SELECT nama_nasabah,SUM(saldo) AS "Jumlah Saldo (Rp)"
    -> FROM nasabah NATURAL JOIN transaksi
    -> NATURAL JOIN rekening
    -> GROUP BY nama_nasabah
    -> HAVING SUM(saldo) BETWEEN 500000 AND 2000000
    -> ORDER BY nama_nasabah;
+-----------------+-------------------+
| nama_nasabah    | Jumlah Saldo (Rp) |
+-----------------+-------------------+
| Canka Lokananta |           1100000 |
+-----------------+-------------------+
1 row in set (1.037 sec)
```

5) SELECT nama_nasabah,tanggal,jumlah FROM nasabah NATURAL JOIN transaksi WHERE jumlah > 100000 GROUP BY jumlah ORDER BY jumlah;

```
MariaDB [perbankan]> SELECT nama_nasabah,tanggal,jumlah FROM nasabah NATURAL JOIN transaksi WHERE jumlah > 100000 GROUP
BY jumlah ORDER BY jumlah;
+----------------+---------------------+--------+
| nama_nasabah   | tanggal             | jumlah |
+----------------+---------------------+--------+
| Canka Lokananta | 2009-11-15 00:00:00 | 150000 |
| Sutopo         | 2009-11-15 00:00:00 | 200000 |
+----------------+---------------------+--------+
2 rows in set (0.003 sec)
```

6) Nama nasabah yang jumlah transaksinya di atas 150000

SELECT nama_nasabah,SUM(jumlah) AS "Jumlah Transaksi" FROM nasabah NATURAL JOIN transaksi GROUP BY nama_nasabah HAVING SUM(jumlah) > 150000 GROUP BY nama_nasabah ORDER BY nama_nasabah;

```
MariaDB [perbankan]> SELECT nama_nasabah,SUM(jumlah) AS "Jumlah Transaksi" FROM nasabah NATURAL JOIN transaksi GROUP BY
nama_nasabah HAVING SUM(jumlah) > 150000 ORDER BY nama_nasabah;
+------------------+------------------+
| nama_nasabah     | Jumlah Transaksi |
+------------------+------------------+
| Budi Eko Prayogo |           320000 |
| Canka Lokananta  |           170000 |
| Kartika Padmasari |          390000 |
| Maryati          |           530000 |
| Suparman         |           340000 |
| Sutopo           |           400000 |
+------------------+------------------+
6 rows in set (0.002 sec)
```

7) Nama nasabah yang jumlah transaksi nya paling besar antara tgl 19 Nov – 22 Nov 2009

SELECT nama_nasabah,SUM(jumlah) FROM nasabah NATURAL JOIN transaksi WHERE tanggal BETWEEN '2009-11-19' AND '2009-11-22' GROUP BY nama_nasabah HAVING (SUM(jumlah) ORDER BY SUM(jumlah) ;

```
MariaDB [perbankan]> SELECT nama_nasabah,SUM(jumlah)  FROM nasabah NATURAL JOIN transaksi WHERE tanggal BETWEEN
    -> '2009-11-19' AND '2009-11-22' GROUP BY nama_nasabah HAVING SUM(jumlah) ORDER BY SUM(jumlah);
+------------------+-------------+
| nama_nasabah     | SUM(jumlah) |
+------------------+-------------+
| Suparman         |       40000 |
| Sutopo           |      150000 |
| Maryati          |      150000 |
| Kartika Padmasari |     320000 |
+------------------+-------------+
4 rows in set (0.003 sec)
```

8) Nasabah yang jumlah saldonya lebih dari 3000000
   SELECT nama_nasabah,SUM(saldo) AS "Jumlah Saldo (Rp)"
   FROM nasabah NATURAL JOIN transaksi
   NATURAL JOIN rekening
   GROUP BY nama_nasabah
   HAVING SUM(saldo) >3000000
   ORDER BY nama_nasabah;

```
ariaDB [perbankan]>  SELECT nama_nasabah,SUM(saldo) AS "Jumlah Saldo (Rp)"
    -> FROM nasabah NATURAL JOIN transaksi
    -> NATURAL JOIN rekening
    -> GROUP BY nama_nasabah
    -> HAVING SUM(saldo) >3000000
    -> ORDER BY nama_nasabah;
+-------------------+------------------+
| nama_nasabah      | Jumlah Saldo (Rp) |
+-------------------+------------------+
| Budi Murtono      |          5000000 |
| Kartika Padmasari |          3500000 |
| Maryati           |          4500000 |
| Suparman          |         14000000 |
| Sutopo            |          3600000 |
+-------------------+------------------+
rows in set (0.002 sec)
```

9) Transaksi terbesar Sutopo

SELECT nama_nasabah, MAX(jumlah) AS "Transaksi Terbesar (Rp)" FROM nasabah NATURAL JOIN transaksi WHERE nama_nasabah = 'Sutopo';

```
MariaDB [perbankan]> SELECT nama_nasabah, MAX(jumlah) AS "Transaksi Terbesar (Rp)" FROM nasabah NATURAL JOIN transaksi W
HERE nama_nasabah = 'Sutopo';
+--------------+-------------------------+
| nama_nasabah | Transaksi Terbesar (Rp) |
+--------------+-------------------------+
| Sutopo       |                  200000 |
+--------------+-------------------------+
1 row in set (0.002 sec)
```

10) Tampilkan Nama Nasabah yang transaksi nya terkecil diantara tanggal 13 sampai 16

SELECT nama_nasabah, MIN(jumlah) AS "Transaksi Terkecil (Rp)" FROM nasabah NATURAL JOIN transaksi WHERE tanggal BETWEEN '2009-11-13' AND '2009-11-16';

```
MariaDB [perbankan]> SELECT nama_nasabah, MIN(jumlah) AS "Transaksi Terkecil (Rp)" FROM nasabah NATURAL JOIN transaksi
    -> WHERE tanggal BETWEEN '2009-11-13' AND '2009-11-16';
+--------------+-------------------------+
| nama_nasabah | Transaksi Terkecil (Rp) |
+--------------+-------------------------+
| Suparman     |                   20000 |
+--------------+-------------------------+
1 row in set (0.002 sec)
```

11) SELECT DISTINCT nama_nasabah,tanggal, COUNT(jenis_transaksi) FROM nasabah NATURAL JOIN transaksi WHERE jumlah > 50000 AND jenis_transaksi = 'kredit' GROUP BY nama_nasabah ORDER BY nama_nasabah;

```
MariaDB [perbankan]> SELECT DISTINCT nama_nasabah,tanggal, COUNT(jenis_transaksi) FROM nasabah NATURAL JOIN transaksi
ERE jumlah > 50000 AND jenis_transaksi = 'kredit' GROUP BY nama_nasabah ORDER BY nama_nasabah;
+-------------------+---------------------+-----------------------+
| nama_nasabah      | tanggal             | COUNT(jenis_transaksi) |
+-------------------+---------------------+-----------------------+
| Budi Eko Prayogo  | 2009-12-05 00:00:00 |                     1 |
| Canka Lokananta   | 2009-11-15 00:00:00 |                     1 |
| Kartika Padmasari | 2009-11-20 00:00:00 |                     1 |
| Maryati           | 2009-11-28 00:00:00 |                     2 |
| Suparman          | 2009-11-28 00:00:00 |                     1 |
| Sutopo            | 2009-11-15 00:00:00 |                     2 |
+-------------------+---------------------+-----------------------+
6 rows in set (0.002 sec)
```

12) SELECT DISTINCT nama_nasabah,kode_cabang AS "dari berasal",SUM(jumlah) AS "total" FROM nasabah NATURAL JOIN transaksi NATURAL JOIN rekening GROUP BY nama_nasabah HAVING SUM(jumlah) ORDER BY nama_nasabah;

```
MariaDB [perbankan]> SELECT DISTINCT nama_nasabah,kode_cabang AS "dari berasal",SUM(jumlah) AS "total" FROM nasabah NATU
RAL JOIN transaksi NATURAL JOIN rekening GROUP BY nama_nasabah HAVING SUM(jumlah) ORDER BY nama_nasabah;
+------------------+--------------+--------+
| nama_nasabah     | dari berasal | total  |
+------------------+--------------+--------+
| Budi Eko Prayogo | BRUS         | 320000 |
| Budi Murtono     | BRUB         | 100000 |
| Canka Lokananta  | BRUY         | 170000 |
| Kartika Padmasari| BRUS         | 390000 |
| Maryati          | BRUS         | 530000 |
| Suparman         | BRUM         | 340000 |
| Sutopo           | BRUM         | 400000 |
+------------------+--------------+--------+
```

13) SELECT DISTINCT nama_nasabah,AVG(saldo) FROM nasabah NATURAL JOIN transaksi NATURAL JOIN rekening WHERE kode_cabang = 'BRUY' GROUP BY nama_nasabah HAVING AVG(saldo) ORDER BY nama_nasabah;

```
MariaDB [perbankan]> SELECT DISTINCT nama_nasabah,AVG(saldo) FROM nasabah NATURAL JOIN transaksi NATURAL JOIN rekening W
HERE kode_cabang = 'BRUY' GROUP BY nama_nasabah HAVING AVG(saldo) ORDER BY nama_nasabah;
+-----------------+--------------+
| nama_nasabah    | AVG(saldo)   |
+-----------------+--------------+
| Canka Lokananta | 550000.0000  |
+-----------------+--------------+
```

14) SELECT DISTINCT id_nasabah,nama_cabang,saldo-75000 FROM nasabah NATURAL JOIN transaksi NATURAL JOIN rekening NATURAL JOIN cabang_bank GROUP BY id_nasabah ORDER BY id_nasabah;

```
MariaDB [perbankan]> SELECT DISTINCT id_nasabah,nama_cabang,saldo-75000 FROM nasabah NATURAL JOIN transaksi NATURAL JOIN
rekening NATURAL JOIN cabang_bank GROUP BY id_nasabah ORDER BY id_nasabah;
+------------+--------------------------+-------------+
| id_nasabah | nama_cabang              | saldo-75000 |
+------------+--------------------------+-------------+
|          2 | Bank Rut Unit Surakarta  |      675000 |
|          3 | Bank Rut Unit Surakarta  |     2925000 |
|          4 | Bank Rut Unit Surakarta  |      425000 |
|          5 | Bank Rut Unit Surakarta  |      925000 |
|          9 | Bank Rut Unit Yogyakarta |      475000 |
|         10 | Bank Rut Unit Boyolali   |     4925000 |
+------------+--------------------------+-------------+
rows in set (0.003 sec)
```

15) SELECT DISTINCT nama_nasabah,no_rekening,kode_cabang AS "Asal",jumlah FROM nasabah NATURAL JOIN transaksi NATURAL JOIN rekening WHERE no_rekening = 104 ORDER BY jumlah;

```
MariaDB [perbankan]> SELECT DISTINCT nama_nasabah,no_rekening,kode_cabang AS "Asal" ,jumlah FROM nasabah NATURAL JOIN tr
ansaksi NATURAL JOIN rekening WHERE no_rekening = 104 ORDER BY jumlah;
+--------------+-------------+------+--------+
| nama_nasabah | no_rekening | Asal | jumlah |
+--------------+-------------+------+--------+
| Sutopo       |         104 | BRUM |  50000 |
| Sutopo       |         104 | BRUM | 100000 |
| Sutopo       |         104 | BRUM | 200000 |
+--------------+-------------+------+--------+
```