DATABASE SYSTEMS PRACTICUM

PRACTICUM 8

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INFORMATION TECHNOLOGY

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1. **Activity**

```
MariaDB [perbankan]> SELECT transaksi.tanggal, transaksi.jenis_transaksi, transa
ksi.jumlah FROM nasabah, transaksi WHERE nasabah.id_nasabah=transaksi.id_nasabah
FK AND nasabah.nama_nasabah IN ('Sutopo','Canka Lokananta') ORDER BY transaksi.t
anggal;
+---------------------+-----------------+---------+
| tanggal             | jenis_transaksi | jumlah  |
+---------------------+-----------------+---------+
| 2009-11-15 00:00:00 | kredit          | 150000  |
| 2009-11-15 00:00:00 | kredit          | 200000  |
| 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 (0.00 sec)
```

```
MariaDB [perbankan]> SELECT transaksi.tanggal, nasabah.nama_nasabah, transaksi.j
enis_transaksi, transaksi.jumlah FROM nasabah, transaksi WHERE transaksi.tanggal
 BETWEEN '2009-11-15' AND '2009-11-20' AND nasabah.id_nasabah = transaksi.id_nas
abahFK 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 (0.00 sec)

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           | 2080000    |
| kredit          | 2400000    |
+-----------------+------------+
2 rows in set (0.00 sec)
```

```
MariaDB [perbankan]> SELECT jenis_transaksi AS "Jenis Transaksi", MAX(jumlah) AS
 "Transaksi Terbesar", MIN(jumlah) AS "Transaksi Terkecil" FROM transaksi GROUP
BY transaksi.jenis_transaksi;
+-----------------+--------------------+--------------------+
| Jenis Transaksi | Transaksi Terbesar | Transaksi Terkecil |
+-----------------+--------------------+--------------------+
| debit           |            200000  |             20000  |
| kredit          |            200000  |             20000  |
+-----------------+--------------------+--------------------+
2 rows in set (0.00 sec)
```

```
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 (0.00 sec)

MariaDB [perbankan]>
```

2. Assignment

```
MariaDB [perbankan]> SELECT jenis_transaksi, jumlah AS "Rp", count(jumlah) FROM
transaksi, nasabah WHERE nasabah.id_nasabah = transaksi.id_nasabahFK AND nama_na
sabah like "%Kartika Padmasari" GROUP BY jenis_transaksi;
+-----------------+--------+----------------+
| jenis_transaksi | Rp     | count(jumlah)  |
+-----------------+--------+----------------+
| debit           | 100000 |              2 |
| kredit          |  20000 |              3 |
+-----------------+--------+----------------+
2 rows in set (0.00 sec)
```

```
MariaDB [perbankan]> SELECT SUM(saldo) from rekening, nasabah, nasabah_has_reken
ing WHERE nasabah.id_nasabah = nasabah_has_rekening.id_nasabahFK AND rekening.no
_rekening = nasabah_has_rekening.no_rekeningFK AND nama_nasabah = "Maryati";
+------------+
| SUM(saldo) |
+------------+
|     750000 |
+------------+
1 row in set (0.00 sec)
```

```
MariaDB [perbankan]> SELECT COUNT(no_transaksi) AS "Jumlah Transaksi",nama_caban
g FROM transaksi, rekening, cabang_bank WHERE transaksi.no_rekeningFK = rekening
.no_rekening AND cabang_bank.kode_cabang = rekening.kode_cabangFK GROUP BY nama_
cabang;
+------------------+-----------------------------+
| Jumlah Transaksi | nama_cabang                 |
+------------------+-----------------------------+
|                3 | Bank Rut Unit Balikpapan    |
|                2 | Bank Rut Unit Berau         |
|                2 | Bank Rut Unit Boyolali      |
|                3 | Bank Rut Unit Karanganyar   |
|                1 | Bank Rut Unit Kartasura     |
|                8 | Bank Rut Unit Magelang      |
|                1 | Bank Rut Unit Pontianak     |
|                2 | Bank Rut Unit Samarinda     |
|                2 | Bank Rut Unit Sukoharjo     |
|               18 | Bank Rut Unit Surakarta     |
|                1 | Bank Rut Unit Tanjung Selor |
|                4 | Bank Rut Unit Tarakan       |
|                3 | Bank Rut Unit Yogyakarta    |
+------------------+-----------------------------+
13 rows in set (0.00 sec)
```

```
MariaDB [perbankan]> SELECT nama_nasabah, SUM(saldo) FROM rekening,nasabah, nasa
bah_has_rekening WHERE nasabah.id_nasabah = nasabah_has_rekening.id_nasabahFK AN
D rekening.no_rekening= nasabah_has_rekening.no_rekeningFK AND saldo BETWEEN 500
000 AND 2000000 GROUP BY rekening.no_rekening ORDER BY rekening.no_rekening;
+-------------------+------------+
| nama_nasabah      | SUM(saldo) |
+-------------------+------------+
| Kartika Padmasari |     500000 |
| Maryati           |     750000 |
| Sutopo            |     900000 |
| Suparman          |    2000000 |
| Kartika Padmasari |    2000000 |
| Canka Lokananta   |     550000 |
| Muliana           |    2000000 |
| Putri             |     500000 |
| Puput             |     900000 |
| Danindya          |    2000000 |
+-------------------+------------+
10 rows in set (0.00 sec)
```

```
MariaDB [perbankan]> SELECT nama_nasabah, tanggal, jumlah AS "Rp" FROM nasabah,
transaksi WHERE nasabah.id_nasabah = transaksi.id_nasabahFK AND transaksi.jumlah
 > 100000 ORDER BY transaksi.jumlah DESC;
+-------------------+---------------------+--------+
| nama_nasabah      | tanggal             | Rp     |
+-------------------+---------------------+--------+
| Sutopo            | 2009-11-15 00:00:00 | 200000 |
| Danindya          | 2009-12-19 00:00:00 | 200000 |
| Kartika Padmasari | 2009-11-20 00:00:00 | 200000 |
| Maryati           | 2009-11-28 00:00:00 | 200000 |
| Budi Eko Prayogo  | 2009-12-05 00:00:00 | 200000 |
| Danindya          | 2009-12-08 00:00:00 | 200000 |
| Khatulistyawara   | 2009-12-15 00:00:00 | 200000 |
| Putri             | 2009-12-16 00:00:00 | 175000 |
| Puput             | 2009-12-20 00:00:00 | 150000 |
| Khatulistyawara   | 2009-12-13 00:00:00 | 150000 |
| Canka Lokananta   | 2009-11-15 00:00:00 | 150000 |
| Budi Martono      | 2009-12-18 00:00:00 | 130000 |
| Puput             | 2009-12-14 00:00:00 | 125000 |
| Puput             | 2009-12-14 00:00:00 | 125000 |
+-------------------+---------------------+--------+
14 rows in set (0.00 sec)

MariaDB [perbankan]> SELECT transaksi.tanggal, transaksi.jenis_transaksi, transa
ksi.jumlah FROM nasabah, transaksi WHERE nasabah.id_nasabah=transaksi.id_nasabah
FK AND nasabah.nama_nasabah IN ('Sutopo','Canka Lokananta') ORDER BY transaksi.t
anggal;
+---------------------+-----------------+--------+
| tanggal             | jenis_transaksi | jumlah |
+---------------------+-----------------+--------+
| 2009-11-15 00:00:00 | kredit          | 150000 |
| 2009-11-15 00:00:00 | kredit          | 200000 |
| 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 (0.00 sec)

MariaDB [perbankan]> SELECT transaksi.tanggal, nasabah.nama_nasabah, transaksi.j
enis_transaksi, transaksi.jumlah FROM nasabah, transaksi WHERE transaksi.tanggal
 BETWEEN '2009-11-15' AND '2009-11-20' AND nasabah.id_nasabah = transaksi.id_nas
abahFK 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 (0.00 sec)

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           |    2080000 |
| kredit          |    2400000 |
+-----------------+------------+
2 rows in set (0.00 sec)

MariaDB [perbankan]> SELECT jenis_transaksi AS "Jenis Transaksi", MAX(jumlah) AS
 "Transaksi Terbesar", MIN(jumlah) AS "Transaksi Terkecil" FROM transaksi GROUP
BY transaksi.jenis_transaksi;
+-----------------+--------------------+--------------------+
| Jenis Transaksi | Transaksi Terbesar | Transaksi Terkecil |
+-----------------+--------------------+--------------------+
| debit           |             200000 |              20000 |
| kredit          |             200000 |              20000 |
+-----------------+--------------------+--------------------+
2 rows in set (0.00 sec)
```

```
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 (0.00 sec)

MariaDB [perbankan]>
```

```
MariaDB [perbankan]> SELECT jenis_transaksi, jumlah AS "Rp", count(jumlah) FROM
transaksi, nasabah WHERE nasabah.id_nasabah = transaksi.id_nasabahFK AND nama_na
sabah like "%Kartika Padmasari" GROUP BY jenis_transaksi;
+-----------------+--------+---------------+
| jenis_transaksi | Rp     | count(jumlah) |
+-----------------+--------+---------------+
| debit           | 100000 |             2 |
| kredit          |  20000 |             3 |
+-----------------+--------+---------------+
2 rows in set (0.00 sec)
```

```
MariaDB [perbankan]> SELECT SUM(saldo) from rekening, nasabah, nasabah_has_reken
ing WHERE nasabah.id_nasabah = nasabah_has_rekening.id_nasabahFK AND rekening.no
_rekening = nasabah_has_rekening.no_rekeningFK AND nama_nasabah = "Maryati";
+------------+
| SUM(saldo) |
+------------+
|     750000 |
+------------+
1 row in set (0.00 sec)
```

```
MariaDB [perbankan]> SELECT COUNT(no_transaksi) AS "Jumlah Transaksi",nama_caban
g FROM transaksi, rekening, cabang_bank WHERE transaksi.no_rekeningFK = rekening
.no_rekening AND cabang_bank.kode_cabang = rekening.kode_cabangFK GROUP BY nama_
cabang;
+------------------+-----------------------------+
| Jumlah Transaksi | nama_cabang                 |
+------------------+-----------------------------+
|                3 | Bank Rut Unit Balikpapan    |
|                2 | Bank Rut Unit Berau         |
|                2 | Bank Rut Unit Boyolali      |
|                3 | Bank Rut Unit Karanganyar   |
|                1 | Bank Rut Unit Kartasura     |
|                8 | Bank Rut Unit Magelang      |
|                1 | Bank Rut Unit Pontianak     |
|                2 | Bank Rut Unit Samarinda     |
|                2 | Bank Rut Unit Sukoharjo     |
|               18 | Bank Rut Unit Surakarta     |
|                1 | Bank Rut Unit Tanjung Selor |
|                4 | Bank Rut Unit Tarakan       |
|                3 | Bank Rut Unit Yogyakarta    |
+------------------+-----------------------------+
13 rows in set (0.00 sec)
```

```
MariaDB [perbankan]> SELECT nama_nasabah, SUM(saldo) FROM rekening,nasabah, nasa
bah_has_rekening WHERE nasabah.id_nasabah = nasabah_has_rekening.id_nasabahFK AN
D rekening.no_rekening= nasabah_has_rekening.no_rekeningFK AND saldo BETWEEN 500
000 AND 2000000 GROUP BY rekening.no_rekening ORDER BY rekening.no_rekening;
+-------------------+------------+
| nama_nasabah      | SUM(saldo) |
+-------------------+------------+
| Kartika Padmasari |     500000 |
| Maryati           |     750000 |
| Sutopo            |     900000 |
| Suparman          |    2000000 |
| Kartika Padmasari |    2000000 |
| Canka Lokananta   |     550000 |
| Muliana           |    2000000 |
| Putri             |     500000 |
| Puput             |     900000 |
| Danindya          |    2000000 |
+-------------------+------------+
10 rows in set (0.00 sec)
```