

PRAKTIKUM SISTEM BASIS DATA

MODUL 7

Nama : Dewantara Surya Jaya

NIM : L200180013

```
MariaDB [perbankan]> SELECT nama_cabang,alamat_cabang FROM cabang_bank ORDER BY nama_cabang;
```

nama_cabang	alamat_cabang
Bank Rut Unit Boyolali	Jl. Ahmad Yani 45
Bank Rut Unit Klaten	Jl. Suparman 23
Bank Rut Unit Surakarta	Jl. Slamet Riyadi 18
Bank Rut Unit Wonogiri	Jl. Ahmad Yani 23
Bank Rut Unit Yogyakarta	Jl. Anggrek 21

```
5 rows in set (0.113 sec)
```

```
MariaDB [perbankan]> SELECT no_rekening,pin,saldo FROM rekening ORDER BY saldo DESC;
```

no_rekening	pin	saldo
108	0000	5000000
106	6666	3000000
105	5555	2000000
107	7777	1000000
104	4444	900000
103	3333	750000
110	1234	550000
101	1111	500000
102	2222	350000
112	0123	300000
113	8888	255000
111	4321	150000
109	9999	0

```
13 rows in set (0.057 sec)
```

```

MariaDB [perbankan]> SELECT rekening.no_rekening,nasabah.nama_nasabah,
-> nasabah.alamat_nasabar FROM rekening,nasabah,nasabah_has_rekening
-> WHERE nasabah.id_nasabah = nasabah_has_rekening.id_nasabahFK AND
-> rekening.no_rekening = nasabah_has_rekening.no_rekeningFK ORDER BY
-> nasabah.nama_nasabah;

```

no_rekening	nama_nasabah	alamat_nasabar
102	Budi Eko Prayogo	Jl. Kantil 30
107	Budi Eko Prayogo	Jl. Kantil 30
108	Budi Murtono	Jl. Merak 22
113	Budi Murtono	Jl. Merak 22
110	Canka Lokananta	Jl. Tidar 86
101	Kartika Padmasari	Jl. Manggis 15
107	Kartika Padmasari	Jl. Manggis 15
103	Maryati	Jl. MT. Haryono
111	Sari Murti	Jl. Pangandaran 11
112	Sari Murti	Jl. Pangandaran 11
109	Satria Eka Jaya	Jl. Slamet Riyadi 45
105	Suparman	Jl. Hasanudin 81
106	Suparman	Jl. Hasanudin 81
104	Sutopo	Jl. Jendral Sudirman 12

14 rows in set (1.670 sec)

```

MariaDB [perbankan]> SELECT rekening.no_rekening,nasabah.nama_nasabah,
-> rekening.saldo FROM rekening,nasabah,nasabah_has_rekening
-> WHERE nasabah.id_nasabah = nasabah_has_rekening.id_nasabahFK
-> AND rekening.no_rekening = nasabah_has_rekening.no_rekeningFK
-> ORDER BY nasabah.nama_nasabah;

```

no_rekening	nama_nasabah	saldo
102	Budi Eko Prayogo	350000
107	Budi Eko Prayogo	1000000
108	Budi Murtono	5000000
113	Budi Murtono	255000
110	Canka Lokananta	550000
101	Kartika Padmasari	500000
107	Kartika Padmasari	1000000
103	Maryati	750000
111	Sari Murti	150000
112	Sari Murti	300000
109	Satria Eka Jaya	0
105	Suparman	2000000
106	Suparman	3000000
104	Sutopo	900000

14 rows in set (0.002 sec)

TUGAS

- 1) Menggunakan **USING**

```

SELECT DISTINCT nama_nasabah,alamat_nasabah,jenis_transaksi,jumlah
FROM nasabah JOIN transaksi
USING(id_nasabah)
WHERE jenis_transaksi='kredit'
ORDER BY nama_nasabah;

```

Menggunakan **ON**

```

SELECT DISTINCT nama_nasabah,alamat_nasabah,jenis_transaksi,jumlah
FROM nasabah JOIN transaksi
ON nasabah.id_nasabah = transaksi.id_nasabah
WHERE jenis_transaksi='kredit'
ORDER BY nama_nasabah;

```

Menggunakan **NATURAL**

```

SELECT DISTINCT nama_nasabah,alamat_nasabah,jenis_transaksi,jumlah
FROM nasabah NATURAL JOIN transaksi
WHERE jenis_transaksi='kredit'
ORDER BY nama_nasabah;

```

nama_nasabah	alamat_nasabah	jenis_transaksi	jumlah
Budi Eko Prayogo	Jl. Kantil 30	kredit	200000
Budi Eko Prayogo	Jl. Kantil 30	kredit	30000
Canka Lokananta	Jl. Tidar 86	kredit	150000
Kartika Padmasari	Jl. Manggis 15	kredit	20000
Kartika Padmasari	Jl. Manggis 15	kredit	200000
Maryati	Jl. MT. Haryono	kredit	100000
Maryati	Jl. MT. Haryono	kredit	200000
Suparman	Jl. Hasanudin 81	kredit	100000
Suparman	Jl. Hasanudin 81	kredit	50000
Sutopo	Jl. Jendral Sudirman 12	kredit	200000
Sutopo	Jl. Jendral Sudirman 12	kredit	100000

11 rows in set (0.002 sec)

2) Menggunakan **USING**

```

SELECT DISTINCT nama_nasabah,no_rekeningFK,jenis_transaksi,jumlah
FROM nasabah JOIN transaksi
USING(id_nasabah)
WHERE tanggal = '2009-11-21'

```

ORDER BY nama_nasabah;

Menggunakan **ON**

```
SELECT DISTINCT nama_nasabah,no_rekeningFK,jenis_transaksi,jumlah
```

```
FROM nasabah JOIN transaksi
```

```
ON nasabah.id_nasabah = transaksi.id_nasabah
```

```
WHERE tanggal = '2009-11-21'
```

ORDER BY nama_nasabah;

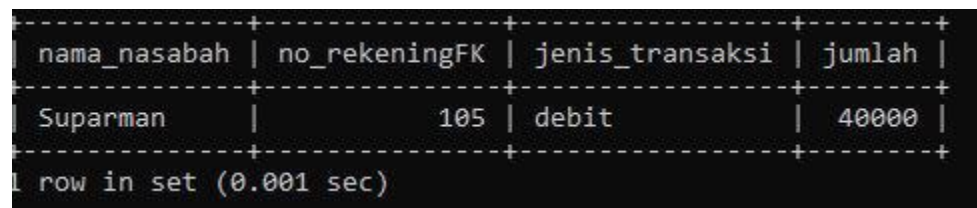
Menggunakan **NATURAL**

```
SELECT DISTINCT nama_nasabah,no_rekeningFK,jenis_transaksi,jumlah
```

```
FROM nasabah NATURAL JOIN transaksi
```

```
WHERE tanggal = '2009-11-21'
```

ORDER BY nama_nasabah;



nama_nasabah	no_rekeningFK	jenis_transaksi	jumlah
Suparman	105	debit	40000

1 row in set (0.001 sec)

3) Menggunakan **USING**

```
SELECT DISTINCT no_rekeningFK,nama_nasabah,jenis_transaksi,jumlah
```

```
FROM nasabah JOIN transaksi
```

```
USING(id_nasabah)
```

```
WHERE jumlah = 20000;
```

Menggunakan **ON**

```
SELECT DISTINCT no_rekeningFK,nama_nasabah,jenis_transaksi,jumlah
```

```
FROM nasabah JOIN transaksi
```

```
ON nasabah.id_nasabah = transaksi.id_nasabah
```

```
WHERE jumlah = 20000;
```

Menggunakan **NATURAL**

```
SELECT DISTINCT no_rekeningFK,nama_nasabah,jenis_transaksi,jumlah
```

```
FROM nasabah NATURAL JOIN transaksi
```

WHERE jumlah = 20000;

no_rekeningFK	nama_nasabah	jenis_transaksi	jumlah
101	Kartika Padmasari	kredit	20000
102	Budi Eko Prayogo	debit	20000
110	Canka Lokananta	debit	20000

3 rows in set (0.003 sec)

4) Menggunakan **USING**

```
SELECT DISTINCT no_rekeningFK,nama_nasabah,alamat_nasabah
```

```
FROM nasabah JOIN transaksi
```

```
USING(id_nasabah)
```

```
WHERE nama_nasabah LIKE 'Su%';
```

Menggunakan **ON**

```
SELECT DISTINCT no_rekeningFK,nama_nasabah,alamat_nasabah
```

```
FROM nasabah JOIN transaksi
```

```
ON nasabah.id_nasabah = transaksi.id_nasabah
```

```
WHERE nama_nasabah LIKE 'Su%';
```

Menggunakan **NATURAL**

```
SELECT DISTINCT no_rekeningFK,nama_nasabah,alamat_nasabah
```

```
FROM nasabah NATURAL JOIN transaksi
```

```
WHERE nama_nasabah LIKE 'Su%';
```

no_rekeningFK	nama_nasabah	alamat_nasabah
105	Suparman	Jl. Hasanudin 81
106	Suparman	Jl. Hasanudin 81
104	Sutopo	Jl. Jendral Sudirman 12

3 rows in set (0.003 sec)


```
MariaDB [perbankan]> SELECT DISTINCT no_rekeningFK AS 'Nomor Rekening',
-> nama_nasabah AS 'Nama Nasabah',
-> jumlah AS 'Jumlah Transaksi'
-> FROM nasabah NATURAL JOIN transaksi
-> WHERE jenis_transaksi = 'debit';
```

Nomor Rekening	Nama Nasabah	Jumlah Transaksi
105	Suparman	50000
103	Maryati	40000
106	Suparman	50000
102	Budi Eko Prayogo	20000
107	Kartika Padmasari	100000
103	Maryati	100000
104	Sutopo	50000
105	Suparman	40000
103	Maryati	50000
102	Budi Eko Prayogo	50000
108	Budi Murtono	100000
101	Kartika Padmasari	50000
110	Canka Lokananta	20000

13 rows in set (0.002 sec)

5)

```
MariaDB [perbankan]> SELECT DISTINCT nama_nasabah,no_rekeningFK,jumlah
-> FROM nasabah NATURAL JOIN transaksi
-> WHERE no_rekeningFK <106 AND jenis_transaksi = 'debit'
-> OR id_nasabah <=5 AND jumlah <=100000
-> ORDER BY jumlah;
```

nama_nasabah	no_rekeningFK	jumlah
Kartika Padmasari	101	20000
Budi Eko Prayogo	102	20000
Budi Eko Prayogo	107	30000
Maryati	103	40000
Suparman	105	40000
Kartika Padmasari	101	50000
Suparman	105	50000
Sutopo	104	50000
Budi Eko Prayogo	102	50000
Suparman	106	50000
Maryati	103	50000
Kartika Padmasari	107	100000
Sutopo	104	100000
Suparman	105	100000
Maryati	103	100000

15 rows in set (1.873 sec)

6)

```

MariaDB [perbankan]> SELECT DISTINCT nama_nasabah,no_rekeningFK,jumlah
-> FROM nasabah NATURAL JOIN transaksi
-> WHERE no_rekeningFK >=103 AND id_nasabah <=5
-> OR jenis_transaksi = 'kredit' AND jumlah >=100000
-> ORDER BY jumlah;

```

```

ERROR 2006 (HY000): MySQL server has gone away
No connection. Trying to reconnect...
Connection id:      8
Current database: perbankan

```

nama_nasabah	no_rekeningFK	jumlah
Budi Eko Prayogo	107	30000
Suparman	105	40000
Maryati	103	40000
Suparman	106	50000
Suparman	105	50000
Sutopo	104	50000
Maryati	103	50000
Kartika Padmasari	107	100000
Suparman	105	100000
Maryati	103	100000
Sutopo	104	100000
Canka Lokananta	110	150000
Kartika Padmasari	107	200000
Maryati	103	200000
Sutopo	104	200000
Budi Eko Prayogo	102	200000

7) 16 rows in set (0.500 sec)

```

MariaDB [perbankan]> SELECT DISTINCT nama_nasabah,no_rekeningFK,jumlah
-> FROM nasabah NATURAL JOIN transaksi
-> WHERE no_rekeningFK >103 AND id_nasabah =5
-> OR jumlah >50000 AND tanggal = '2009-12-5'
-> ORDER BY jumlah;

```

nama_nasabah	no_rekeningFK	jumlah
Budi Eko Prayogo	107	30000
Maryati	103	100000
Budi Eko Prayogo	102	200000

8)

```

MariaDB [perbankan]> SELECT DISTINCT nama_nasabah,no_rekeningFK,jumlah
-> FROM nasabah NATURAL JOIN transaksi
-> WHERE no_rekeningFK <105 OR id_nasabah <5
-> AND jenis_transaksi = 'kredit' AND jumlah >=50000
-> ORDER BY jumlah;

```

nama_nasabah	no_rekeningFK	jumlah
Kartika Padmasari	101	20000
Budi Eko Prayogo	102	20000
Maryati	103	40000
Sutopo	104	50000
Budi Eko Prayogo	102	50000
Kartika Padmasari	101	50000
Maryati	103	50000
Suparman	105	50000
Suparman	106	50000
Maryati	103	100000
Suparman	105	100000
Sutopo	104	100000
Sutopo	104	200000
Maryati	103	200000
Kartika Padmasari	107	200000
Budi Eko Prayogo	102	200000

16 rows in set (0.003 sec)

9)

```

MariaDB [perbankan]> SELECT DISTINCT nama_nasabah,no_rekeningFK,jumlah
-> FROM nasabah NATURAL JOIN transaksi
-> WHERE no_rekeningFK = 103 AND id_nasabah <5
-> OR jenis_transaksi = 'kredit' AND jumlah >=100000
-> ORDER BY jumlah;

```

nama_nasabah	no_rekeningFK	jumlah
Maryati	103	40000
Maryati	103	50000
Sutopo	104	100000
Suparman	105	100000
Maryati	103	100000
Canka Lokananta	110	150000
Sutopo	104	200000
Budi Eko Prayogo	102	200000
Kartika Padmasari	107	200000
Maryati	103	200000

10 rows in set (0.002 sec)

10)

Setiap baris dibandingkan pada kondisi kemudian yang hasil akhirnya true akan ditampilkan datanya

11) Tabel yang digunakan adalah nasabah,cabang_bank,rekening,dan transaksi


```

SELECT DISTINCT nama_cabang,nama_nasabah,alamat_nasabah
FROM nasabah INNER JOIN transaksi
ON nasabah.id_nasabah = transaksi.id_nasabah
RIGHT OUTER JOIN rekening
USING (no_rekening)
NATURAL RIGHT OUTER JOIN cabang_bank
WHERE tanggal = '2009-11-22';

```

```

MariaDB [perbankan]> SELECT DISTINCT nama_cabang,nama_nasabah,alamat_nasabah
-> FROM nasabah INNER JOIN transaksi
-> ON nasabah.id_nasabah = transaksi.id_nasabah
-> RIGHT OUTER JOIN rekening
-> USING (no_rekening)
-> NATURAL RIGHT OUTER JOIN cabang_bank
-> WHERE tanggal = '2009-11-22';
+-----+-----+-----+
| nama_cabang          | nama_nasabah      | alamat_nasabah      |
+-----+-----+-----+
| Bank Rut Unit Surakarta | Kartika Padmasari  | Jl. Manggis 15      |
| Bank Rut Unit Surakarta | Maryati            | Jl. MT. Haryono     |
+-----+-----+-----+
2 rows in set (0.002 sec)

```

12) Tabel yang digunakan adalah transaksi, rekening, dan cabang_bank

```

SELECT DISTINCT no_rekening,jenis_transaksi
FROM transaksi NATURAL RIGHT OUTER JOIN rekening
INNER JOIN cabang_bank
USING(kode_cabang)
WHERE alamat_cabang = 'Jl.Slamet Riyadi 18';

```

```

MariaDB [perbankan]> SELECT DISTINCT no_rekening,jenis_transaksi
-> FROM transaksi NATURAL RIGHT OUTER JOIN rekening
-> INNER JOIN cabang_bank
-> USING(kode_cabang)
-> WHERE alamat_cabang = 'Jl. Slamet Riyadi 18';
+-----+-----+
| no_rekening | jenis_transaksi |
+-----+-----+
|          103 | debit          |
|          101 | kredit         |
|          106 | debit          |
|          107 | kredit         |
|          102 | debit          |
|          107 | debit          |
|          106 | kredit         |
|          103 | kredit         |
|          101 | debit          |
|          102 | kredit         |
+-----+-----+
10 rows in set (0.038 sec)

```

13) Tabel yang digunakan nasabah,cabang_bank,rekening,dan transaksi

```
SELECT DISTINCT id_nasabah,nama_nasabah,kode_cabang
```

```
FROM nasabah NATURAL INNER JOIN transaksi
```

```
RIGHT OUTER JOIN rekening
```

```
USING (no_rekening)
```

```
NATURAL RIGHT OUTER JOIN cabang_bank
```

```
WHERE saldo > 100000;
```

```

MariaDB [perbankan]> SELECT DISTINCT id_nasabah,nama_nasabah,kode_cabang
-> FROM nasabah NATURAL INNER JOIN transaksi
-> RIGHT OUTER JOIN rekening
-> USING (no_rekening)
-> NATURAL RIGHT OUTER JOIN cabang_bank
-> WHERE saldo > 100000;
+-----+-----+-----+
| id_nasabah | nama_nasabah | kode_cabang |
+-----+-----+-----+
|          4 | Kartika Padmasari | BRUS       |
|          5 | Budi Eko Prayogo  | BRUS       |
|          2 | Maryati           | BRUS       |
|          3 | Suparman          | BRUS       |
|         10 | Budi Murtono      | BRUB       |
|          9 | Canka Lokananta   | BRUY       |
|        NULL | NULL              | BRUK       |
|        NULL | NULL              | BRUY       |
+-----+-----+-----+
8 rows in set (0.003 sec)

```

14) SELECT DISTINCT no_rekening,nama_nasabah
FROM nasabah NATURAL JOIN transaksi
WHERE tanggal > '2009-12-1'
ORDER BY id_nasabah;

```
MariaDB [perbankan]> SELECT DISTINCT no_rekening,nama_nasabah  
-> FROM nasabah NATURAL JOIN transaksi  
-> WHERE tanggal > '2009-12-1'  
-> ORDER BY id_nasabah;
```

no_rekening	nama_nasabah
103	Maryati
101	Kartika Padmasari
102	Budi Eko Prayogo
110	Canka Lokananta

4 rows in set (0.034 sec)

SELECT DISTINCT id_nasabah,kode_cabang,saldo
FROM nasabah NATURAL INNER JOIN transaksi
RIGHT OUTER JOIN rekening
USING (no_rekening)
NATURAL RIGHT OUTER JOIN cabang_bank
WHERE tanggal < '2009-12-1'
ORDER BY no_transaksi;

```

ariaDB [perbankan]> SELECT DISTINCT id_nasabah,kode_cabang,saldo
-> FROM nasabah NATURAL INNER JOIN transaksi
-> RIGHT OUTER JOIN rekening
-> USING (no_rekening)
-> NATURAL RIGHT OUTER JOIN cabang_bank
-> WHERE tanggal < '2009-12-1'
-> ORDER BY no_transaksi;

```

id_nasabah	kode_cabang	saldo
2	BRUS	750000
4	BRUS	500000
3	BRUS	3000000
5	BRUS	1000000
9	BRUY	550000
5	BRUS	350000
4	BRUS	1000000
10	BRUB	5000000

rows in set (0.003 sec)