

**TUGAS 4 NF ACADEMY
FULLSTACK WEB DEVELOPER
'Database MySQL/MariaDB'**

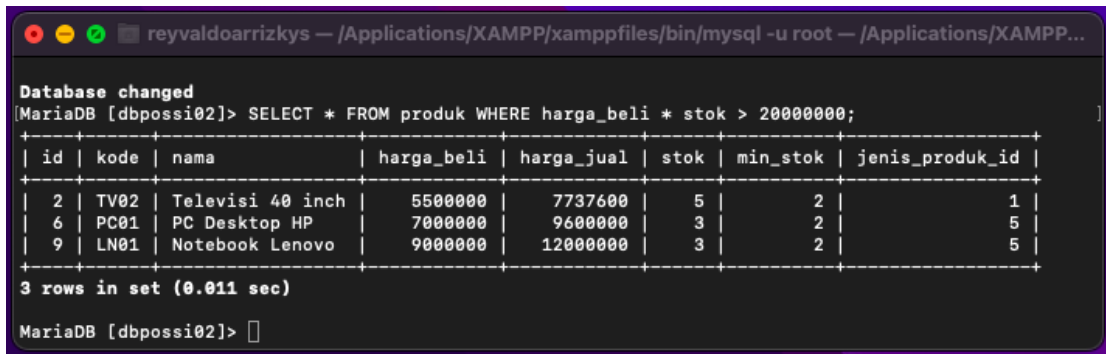
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Prodi/Kampus : Teknik Informatika STT Terpadu Nurul Fikri

SOAL

SOAL 3.1

1. Tampilkan produk yang asset nya diatas 20jt

MariaDB [dbpossi02]> *SELECT * FROM produk WHERE harga_beli * stok > 20000000;*

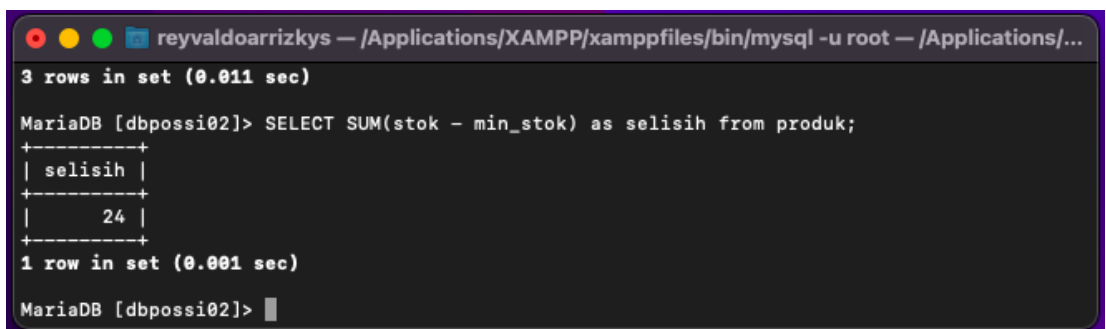


```
Database changed
[MariaDB [dbpossi02]> SELECT * FROM produk WHERE harga_beli * stok > 20000000;
+----+-----+-----+-----+-----+-----+-----+-----+
| id | kode | nama          | harga_beli | harga_jual | stok | min_stok | jenis_produk_id |
+----+-----+-----+-----+-----+-----+-----+-----+
| 2  | TV02 | Televisi 40 inch | 5500000    | 7737600    | 5    | 2        | 1                |
| 6  | PC01 | PC Desktop HP   | 7000000    | 9600000    | 3    | 2        | 5                |
| 9  | LN01 | Notebook Lenovo | 9000000    | 12000000   | 3    | 2        | 5                |
+----+-----+-----+-----+-----+-----+-----+-----+
3 rows in set (0.011 sec)

MariaDB [dbpossi02]> 
```

2. Tampilkan data produk beserta selisih stok dengan minimal stok

MariaDB [dbpossi02]> *SELECT SUM(stok - min_stok) as selisih from produk;*



```
3 rows in set (0.011 sec)

MariaDB [dbpossi02]> SELECT SUM(stok - min_stok) as selisih from produk;
+-----+
| selisih |
+-----+
|      24 |
+-----+
1 row in set (0.001 sec)

MariaDB [dbpossi02]> 
```

3. Tampilkan total asset produk secara keseluruhan

MariaDB [dbpossi02]> *SELECT sum(stok) as total_asset from produk;*

```
reyvaldoarrizkys — /Applications/XAMPP/xamppfiles/bin/mysql -u root — /Applications/...
1 row in set (0.001 sec)

[MariaDB [dbpossi02]> SELECT sum(stok) as total_asset from produk;
+-----+
| total_asset |
+-----+
|          57 |
+-----+
1 row in set (0.002 sec)

MariaDB [dbpossi02]> 
```

4. Tampilkan data pelanggan yang lahirnya antara tahun 1980 sampai 1990

MariaDB [dbpossi02]> *SELECT * FROM pelanggan WHERE YEAR(tgl_lahir) BETWEEN 1999 AND 2004;*

```
reyvaldoarrizkys — /Applications/XAMPP/xamppfiles/bin/mysql -u root — /Applications/XAMPP/xam...
[MariaDB [dbpossi02]> SELECT * FROM pelanggan WHERE YEAR(tgl_lahir) BETWEEN 1999 AND 2004;
Empty set (0.002 sec)

MariaDB [dbpossi02]> 
```

5. Tampilkan data pelanggan yang lahirnya tahun 1998

MariaDB [dbpossi02]> *SELECT * FROM pelanggan WHERE YEAR(tgl_lahir)=1998;*

```
reyvaldoarrizkys — /Applications/XAMPP/xamppfiles/bin/mysql -u root — /Applications/XAMPP/xam...
[MariaDB [dbpossi02]> SELECT * FROM pelanggan WHERE YEAR(tgl_lahir)=1998;
Empty set (0.002 sec)

MariaDB [dbpossi02]> 
```

6. Tampilkan data pelanggan yang berulang tahun bulan agustus

MariaDB [dbpossi02]> *SELECT * FROM pelanggan WHERE MONTH(tgl_lahir)=08;*

```
reyvaldoarrizkys — /Applications/XAMPP/xamppfiles/bin/mysql -u root — /Applications/XAMPP/xam...
[MariaDB [dbpossi02]> SELECT * FROM pelanggan WHERE MONTH(tgl_lahir)=08;
Empty set (0.001 sec)

MariaDB [dbpossi02]> 
```

7. Tampilkan data pelanggan : nama, tmp_lahir, tgl_lahir dan umur (selisih tahun sekarang dikurang tahun kelahiran)

MariaDB [dbpossi02]> SELECT nama, tmp_lahir, tgl_lahir, (YEAR(NOW())-
YEAR(tgl_lahir)) AS umur FROM pelanggan;

```
reyvaldoarrizkys — /Applications/XAMPP/xamppfiles/bin/mysql -u root — /Applications/XAMPP/xam...

[MariaDB [dbpossi02]> SELECT nama, tmp_lahir, tgl_lahir, (YEAR(NOW())-YEAR(tgl_lahir)) AS umur FROM pelanggan;

+-----+-----+-----+-----+
| nama      | tmp_lahir | tgl_lahir | umur |
+-----+-----+-----+-----+
| Agung Sedayu | Solo      | 2010-01-01 | 14   |
| Pandan Wangi | Yogyakarta | 1950-01-01 | 74   |
| Sekar Mirah  | Kediri    | 1983-02-20 | 41   |
| Swandaru Geni | Kediri    | 1981-01-04 | 43   |
| Pradabashu   | Pati      | 1985-04-02 | 39   |
| Gayatri Dwi  | Jakarta   | 1987-11-28 | 37   |
| Dewi Gyat    | Jakarta   | 1988-12-01 | 36   |
| Andre Haru   | Surabaya  | 1990-07-15 | 34   |
| Ahmad Hasan  | Surabaya  | 1992-10-15 | 32   |
| Cassandra    | Belfast   | 1990-11-20 | 34   |
+-----+-----+-----+-----+

10 rows in set (0.001 sec)

MariaDB [dbpossi02]>
```

SOAL 3.2

1. Berapa jumlah pelanggan yang tahun lahirnya 1998

SELECT COUNT() FROM pelanggan WHERE YEAR(tgl_lahir) = 1998;*

```
reyvaldoarrizkys — /Applications/XAMPP/xamppfiles/bin/mysql -u root — /Applications/XAMPP/xam...

[MariaDB [dbpossi02]> SELECT COUNT(*) FROM pelanggan WHERE YEAR(tgl_lahir) = 1998;

+-----+
| COUNT(*) |
+-----+
|         0 |
+-----+

1 row in set (0.002 sec)

MariaDB [dbpossi02]>
```

2. Berapa jumlah pelanggan perempuan yang tempat lahirnya di Jakarta

SELECT COUNT() FROM pelanggan WHERE jk = 'P' AND tmp_lahir = 'Jakarta';*

```
reyvaldoarrizkys — /Applications/XAMPP/xamppfiles/bin/mysql -u root — /Applications/XAMPP/xam...

[MariaDB [dbpossi02]> SELECT COUNT(*) FROM pelanggan WHERE jk = 'P' AND tmp_lahir = 'Jakarta';

+-----+
| COUNT(*) |
+-----+
|         2 |
+-----+

1 row in set (0.001 sec)

MariaDB [dbpossi02]>
```

3. Berapa jumlah total stok semua produk yang harga jualnya dibawah 10rb

SELECT SUM(stok) FROM produk WHERE harga_jual < 10000;

```
reyvaldoarrizkys — /Applications/XAMPP/xamppfiles/bin/mysql -u root — /Applications/XAMPP/xam...
[MariaDB [dbpossi02]> SELECT SUM(stok) FROM produk WHERE harga_jual < 10000;
+-----+
| SUM(stok) |
+-----+
|          39 |
+-----+
1 row in set (0.002 sec)

MariaDB [dbpossi02]> 
```

4. Ada berapa produk yang mempunyai kode awal K

SELECT COUNT() FROM produk WHERE kode LIKE 'K%';*

```
reyvaldoarrizkys — /Applications/XAMPP/xamppfiles/bin/mysql -u root — /Applications/XAMPP/xam...
[MariaDB [dbpossi02]> SELECT COUNT(*) FROM produk WHERE kode LIKE 'K%';
+-----+
| COUNT(*) |
+-----+
|          1 |
+-----+
1 row in set (0.002 sec)

MariaDB [dbpossi02]> 
```

5. Berapa harga jual rata-rata produk yang diatas 1jt

SELECT AVG(harga_jual) FROM produk WHERE harga_jual > 1000000;

```
reyvaldoarrizkys — /Applications/XAMPP/xamppfiles/bin/mysql -u root — /Applications/XAMPP/xam...
[MariaDB [dbpossi02]> SELECT AVG(harga_jual) FROM produk WHERE harga_jual > 1000000;
+-----+
| AVG(harga_jual) |
+-----+
|          8374400 |
+-----+
1 row in set (0.002 sec)

MariaDB [dbpossi02]> 
```

6. Tampilkan jumlah stok yang paling besar

SELECT MAX(stok) FROM produk;

```
reyvaldoarrizkys — /Applications/XAMPP/xamppfiles/bin/mysql -u root — /Applications/XAMPP/xam...
[MariaDB [dbpossi02]> SELECT MAX(stok) FROM produk;
+-----+
| MAX(stok) |
+-----+
|          39 |
+-----+
1 row in set (0.002 sec)

MariaDB [dbpossi02]> 
```

7. Ada berapa produk yang stoknya kurang dari minimal stok

SELECT COUNT() FROM produk WHERE stok < min_stok;*

```

reyvaldoarizkys — /Applications/XAMPP/xamppfiles/bin/mysql -u root — /Applications/XAMPP/xam...
MariaDB [dbpossi02]> SELECT COUNT(*) FROM produk WHERE stok < min_stok;
+-----+
| COUNT(*) |
+-----+
|          3 |
+-----+
1 row in set (0.002 sec)
MariaDB [dbpossi02]>

```

8. Berapa total asset dari keseluruhan produk

*SELECT SUM(harga_jual * stok) FROM produk;*

```

reyvaldoarizkys — /Applications/XAMPP/xamppfiles/bin/mysql -u root — /Applications/XAMPP/xam...
MariaDB [dbpossi02]> SELECT SUM(harga_jual * stok) FROM produk;
+-----+
| SUM(harga_jual * stok) |
+-----+
|          118365975 |
+-----+
1 row in set (0.001 sec)
MariaDB [dbpossi02]>

```

SOAL 3.3

1. Tampilkan data produk : id, nama, stok dan informasi jika stok telah sampai batas minimal atau kurang dari minimum stok dengan informasi 'segera belanja' jika tidak 'stok aman'.

SELECT id, nama, stok, IF(stok < min_stok, 'segera belanja', 'stok aman') AS status_stok FROM produk;

```

reyvaldoarizkys — /Applications/XAMPP/xamppfiles/bin/mysql -u root — /Applications/XAMPP/xam...
MariaDB [dbpossi02]> SELECT id, nama, stok, IF(stok < min_stok, 'segera belanja', 'stok aman') AS status_stok FROM produk;
+----+-----+-----+-----+
| id | nama          | stok | status_stok |
+----+-----+-----+-----+
| 1  | Televisi 21 inch | NULL | stok aman   |
| 2  | Televisi 40 inch | 5    | stok aman   |
| 3  | Kulkas 2 pintu  | 0     | segera belanja |
| 4  | Meja Makan      | 6     | stok aman   |
| 5  | Teh Kotak       | 0     | segera belanja |
| 6  | PC Desktop HP   | 3     | stok aman   |
| 7  | Teh Botol       | 39    | stok aman   |
| 8  | Notebook Acer   | 1     | segera belanja |
| 9  | Notebook Lenovo | 3     | stok aman   |
+----+-----+-----+-----+
9 rows in set (0.002 sec)
MariaDB [dbpossi02]>

```

2. Tampilkan data pelanggan: id, nama, umur dan kategori umur : jika umur < 17 → 'muda' , 17-55 → 'Dewasa', selainnya 'Tua'

SELECT id, nama, TIMESTAMPDIFF(YEAR, tgl_lahir, CURDATE()) AS umur,

```

CASE
    WHEN TIMESTAMPDIFF(YEAR, tgl_lahir, CURDATE()) < 17 THEN 'Muda'
    WHEN TIMESTAMPDIFF(YEAR, tgl_lahir, CURDATE()) BETWEEN 17 AND 55
THEN 'Dewasa'
    ELSE 'Tua'
END AS kategori_umur
FROM pelanggan;

```

```

reyvaldoarizkys — /Applications/XAMPP/xamppfiles/bin/mysql -u root — /Applications/XAMPP/xam...
MariaDB [dbpossi02]> SELECT id, nama, TIMESTAMPDIFF(YEAR, tgl_lahir, CURDATE()) AS umur,
-> CASE
-> WHEN TIMESTAMPDIFF(YEAR, tgl_lahir, CURDATE()) < 17 THEN 'Muda'
-> WHEN TIMESTAMPDIFF(YEAR, tgl_lahir, CURDATE()) BETWEEN 17 AND 55 THEN 'Dewasa'
-> ELSE 'Tua'
-> END AS kategori_umur
-> FROM pelanggan;

```

id	nama	umur	kategori_umur
1	Agung Sedayu	14	Muda
2	Pandan Wangi	74	Tua
3	Sekar Mirah	41	Dewasa
4	Swandaru Geni	43	Dewasa
5	Pradabashu	39	Dewasa
6	Gayatri Dwi	36	Dewasa
7	Dewi Gyat	35	Dewasa
8	Andre Haru	34	Dewasa
9	Ahmad Hasan	32	Dewasa
10	Cassanndra	33	Dewasa

```

10 rows in set (0.002 sec)
MariaDB [dbpossi02]>

```

3. Tampilkan data produk: id, kode, nama, dan bonus untuk kode 'TV01' → 'DVD Player', 'K001' → 'Rice Cooker' selain dari diatas 'Tidak Ada'

```

SELECT id, kode, nama,
CASE
    WHEN kode = 'TV01' THEN 'DVD Player'
    WHEN kode = 'K001' THEN 'Rice Cooker'
    ELSE 'Tidak Ada'
END AS bonus
FROM produk;

```

```
reyvaldoarrizkys — /Applications/XAMPP/xamppfiles/bin/mysql -u root — /Applications/XAMPP/xam...

MariaDB [dbpossi02]> SELECT id, kode, nama,
-> CASE
-> WHEN kode = 'TV01' THEN 'DVD Player'
-> WHEN kode = 'K001' THEN 'Rice Cooker'
-> ELSE 'Tidak Ada'
-> END AS bonus
-> FROM produk;
```

id	kode	nama	bonus
1	TV01	Televisi 21 inch	DVD Player
2	TV02	Televisi 40 inch	Tidak Ada
3	K001	Kulkas 2 pintu	Rice Cooker
4	M001	Meja Makan	Tidak Ada
5	TK01	Teh Kotak	Tidak Ada
6	PC01	PC Desktop HP	Tidak Ada
7	TB01	Teh Botol	Tidak Ada
8	AC01	Notebook Acer	Tidak Ada
9	LN01	Notebook Lenovo	Tidak Ada

```
9 rows in set (0.002 sec)

MariaDB [dbpossi02]>
```

SOAL 3.4

1. Tampilkan data statistik jumlah tempat lahir pelanggan

SELECT tmp_lahir, COUNT() AS jumlah FROM pelanggan GROUP BY tmp_lahir;*

```
reyvaldoarrizkys — /Applications/XAMPP/xamppfiles/bin/mysql -u root — /Applications/XAMPP/xam...

MariaDB [dbpossi02]> SELECT tmp_lahir, COUNT(*) AS jumlah FROM pelanggan GROUP BY tmp_lahir;
```

tmp_lahir	jumlah
Belfast	1
Jakarta	2
Kediri	2
Pati	1
Solo	1
Surabaya	2
Yogyakarta	1

```
7 rows in set (0.001 sec)

MariaDB [dbpossi02]>
```

2. Tampilkan jumlah statistik produk berdasarkan jenis produk

SELECT jp.nama AS jenis_produk, COUNT() AS jumlah FROM produk p
INNER JOIN jenis_produk jp ON p.jenis_produk_id = jp.id
GROUP BY jp.nama;*

```

reyvaldoarrizkys — /Applications/XAMPP/xamppfiles/bin/mysql -u root — /Applications/XAMPP/xam...

MariaDB [dbpossi02]> SELECT jp.nama AS jenis_produk, COUNT(*) AS jumlah FROM produk p
  -> INNER JOIN jenis_produk jp ON p.jenis_produk_id = jp.id
  -> GROUP BY jp.nama;
+-----+-----+
| jenis_produk | jumlah |
+-----+-----+
| elektronik  |      3 |
| furniture   |      1 |
| komputer    |      3 |
| minuman     |      2 |
+-----+-----+
4 rows in set (0.004 sec)

MariaDB [dbpossi02]>

```

3. Tampilkan data pelanggan yang usianya dibawah rata usia pelanggan

*SELECT * FROM pelanggan*

*WHERE TIMESTAMPDIFF(YEAR, tgl_lahir, CURDATE()) < (SELECT
AVG(TIMESTAMPDIFF(YEAR, tgl_lahir, CURDATE())) FROM pelanggan);*

```

reyvaldoarrizkys — /Applications/XAMPP/xamppfiles/bin/mysql -u root — /Applications/XAMPP/xam...

MariaDB [dbpossi02]> SELECT * FROM pelanggan
  -> WHERE TIMESTAMPDIFF(YEAR, tgl_lahir, CURDATE()) < (SELECT AVG(TIMESTAMPDIFF(YEAR, tgl_lahir, CURDATE())) FROM pelanggan);
+-----+-----+-----+-----+-----+-----+-----+-----+
| id | kode | nama          | jk | tmp_lahir | tgl_lahir | email                | kartu_id |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 1  | C001 | Agung Sedayu | L  | Solo      | 2010-01-01 | sedayu@gmail.com     | 1        |
| 6  | C006 | Gayatri Dwi  | P  | Jakarta   | 1987-11-28 | gaya87@gmail.com     | 1        |
| 7  | C007 | Dewi Gyat    | P  | Jakarta   | 1988-12-01 | giyat@gmail.com      | 1        |
| 8  | C008 | Andre Haru   | L  | Surabaya  | 1990-07-15 | andre.haru@gmail.com | 4        |
| 9  | C009 | Ahmad Hasan  | L  | Surabaya  | 1992-10-15 | ahasan@gmail.com     | 4        |
| 10 | C010 | Cassandra    | P  | Belfast   | 1990-11-20 | casa90@gmail.com     | 1        |
+-----+-----+-----+-----+-----+-----+-----+-----+
6 rows in set (0.002 sec)

MariaDB [dbpossi02]>

```

4. Tampilkan data produk yang harganya diatas rata-rata harga produk

*SELECT * FROM produk WHERE harga_jual > (SELECT AVG(harga_jual) FROM
produk);*

```

reyvaldoarrizkys — /Applications/XAMPP/xamppfiles/bin/mysql -u root — /Applications/XAMPP/xam...

MariaDB [dbpossi02]> SELECT * FROM produk WHERE harga_jual > (SELECT AVG(harga_jual) FROM produk);
+-----+-----+-----+-----+-----+-----+-----+-----+
| id | kode | nama          | harga_beli | harga_jual | stok | min_stok | jenis_produk_id |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 2  | TV02 | Televisi 40 inch | 5500000    | 7737600    | 5    | 2        | 1                |
| 6  | PC01 | PC Desktop HP   | 7000000    | 9600000    | 3    | 2        | 5                |
| 8  | AC01 | Notebook Acer   | 8000000    | 10800000   | 1    | 2        | 5                |
| 9  | LN01 | Notebook Lenovo | 9000000    | 12000000   | 3    | 2        | 5                |
+-----+-----+-----+-----+-----+-----+-----+-----+
4 rows in set (0.001 sec)

MariaDB [dbpossi02]>

```

5. Tampilkan data pelanggan yang memiliki kartu dimana iuran tahunan kartu diatas 90rb

SELECT p. FROM pelanggan p*

INNER JOIN kartu k ON p.kartu_id = k.id

WHERE k.iuran > 90000;

```
reyvaldoarizkys — /Applications/XAMPP/xamppfiles/bin/mysql -u root — /Applications/XAMPP/xam...
MariaDB [dbpossi02]> SELECT p.* FROM pelanggan p
  -> INNER JOIN kartu k ON p.kartu_id = k.id
  -> WHERE k.iuran > 90000;
+----+-----+-----+-----+-----+-----+-----+-----+
| id | kode | nama      | jk | tmp_lahir | tgl_lahir | email          | kartu_id |
+----+-----+-----+-----+-----+-----+-----+-----+
| 1  | C001 | Agung Sedayu | L  | Solo      | 2010-01-01 | sedayu@gmail.com | 1        |
| 2  | C002 | Pandan Wangi | P  | Yogyakarta | 1950-01-01 | wangi@gmail.com  | 2        |
| 3  | C003 | Sekar Mirah  | P  | Kediri     | 1983-02-20 | mirah@yahoo.com  | 1        |
| 5  | C005 | Pradabashu   | L  | Pati       | 1985-04-02 | prada85@gmail.com | 2        |
| 6  | C006 | Gayatri Dwi  | P  | Jakarta    | 1987-11-28 | gaya87@gmail.com | 1        |
| 7  | C007 | Dewi Gyat    | P  | Jakarta    | 1988-12-01 | giyat@gmail.com  | 1        |
| 10 | C010 | Cassandra    | P  | Belfast    | 1990-11-20 | casa90@gmail.com | 1        |
+----+-----+-----+-----+-----+-----+-----+-----+
7 rows in set (0.002 sec)

MariaDB [dbpossi02]>
```

6. Tampilkan statistik data produk dimana harga produknya dibawah rata-rata harga produk secara keseluruhan

*SELECT * FROM produk WHERE harga_jual < (SELECT AVG(harga_jual) FROM produk);*

```
reyvaldoarizkys — /Applications/XAMPP/xamppfiles/bin/mysql -u root — /Applications/XAMPP/xam...
MariaDB [dbpossi02]> SELECT * FROM produk WHERE harga_jual < (SELECT AVG(harga_jual) FROM produk);
+----+-----+-----+-----+-----+-----+-----+-----+
| id | kode | nama          | harga_beli | harga_jual | stok | min_stok | jenis_produk_id |
+----+-----+-----+-----+-----+-----+-----+-----+
| 1  | TV01 | Televisi 21 inch | 3500000    | 5241600   | NULL | 2        | 1                |
| 3  | K001 | Kulkas 2 pintu  | 3500000    | 4867200   | 0     | 2        | 1                |
| 4  | M001 | Meja Makan      | 500000     | 660000    | 6     | 3        | 2                |
| 5  | TK01 | Teh Kotak       | 3000       | 4235      | 0     | 10       | 4                |
| 7  | TB01 | Teh Botol       | 2000       | 3025      | 39    | 10       | 4                |
+----+-----+-----+-----+-----+-----+-----+-----+
5 rows in set (0.002 sec)

MariaDB [dbpossi02]>
```

7. Tampilkan data pelanggan yang memiliki kartu dimana diskon kartu yang diberikan diatas 3%

SELECT p. FROM pelanggan p
 INNER JOIN kartu k ON p.kartu_id = k.id
 WHERE k.diskon > 3;*

```
reyvaldoarizkys — /Applications/XAMPP/xamppfiles/bin/mysql -u root — /Applications/XAMPP/xam...
MariaDB [dbpossi02]> SELECT p.* FROM pelanggan p
  -> INNER JOIN kartu k ON p.kartu_id = k.id
  -> WHERE k.diskon > 3;
Empty set (0.002 sec)

MariaDB [dbpossi02]>
```