

## Advanced SELECTs Worksheet 3

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### SOAL 3.1

1. Tampilkan produk yang asset nya diatas 20jt

*SELECT SUM(harga\_beli \* stok) as total from produk; //menghitung total asset*

*SELECT \* FROM produk WHERE harga\_beli \* stok > 20000000; ini yang betul*

```
MariaDB [dbtoko]> SELECT * FROM produk WHERE harga_beli * stok > 20000000;
+-----+-----+-----+-----+-----+-----+-----+-----+
| id | kode | nama  | harga_beli | harga_jual | stok | min_stok | jenis_produk_id |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 3  | K001 | Kulkas | 4000000  | 5000000  | 10  | 3        | 1                |
+-----+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.001 sec)
```

2. Tampilkan data produk beserta selisih stok dengan minimal stok

*SELECT SUM(stok - min\_stok) as selisih from produk;*

```
MariaDB [dbtoko]> SELECT SUM(stok - min_stok) as selisih from produk;
+-----+
| selisih |
+-----+
| 10      |
+-----+
1 row in set (0.001 sec)
```

3. Tampilkan total asset produk secara keseluruhan

*SELECT sum(stok) as total\_asset from produk;*

```
MariaDB [dbtoko]> SELECT sum(stok) as total_asset from produk;
+-----+
| total_asset |
+-----+
| 32          |
+-----+
1 row in set (0.000 sec)
```

4. Tampilkan data pelanggan yang lahirnya antara tahun 1999 sampai 2004

```
SELECT * FROM pelanggan WHERE YEAR(tgl_lahir) BETWEEN 1999 AND 2004;
```

```
MariaDB [dbtoko]> SELECT * FROM pelanggan WHERE YEAR(tgl_lahir) BETWEEN 1999 AND 2004;
+----+-----+-----+----+-----+-----+-----+-----+-----+
| id | kode | nama_pelanggan | jk | tmp_lahir | tgl_lahir | email | kartu_id | alamat |
+----+-----+-----+----+-----+-----+-----+-----+-----+
| 3 | 011103 | Sekar | P | Kediri | 2001-09-08 | sekar@gmail.com | 1 | Jalan Kediri Jaya |
| 5 | 011105 | Pradana | L | Jakarta | 2001-08-01 | pradana@gmail.com | 2 | Jalan Kemang |
| 6 | 011106 | Gayatri Putri | P | Jakarta | 2002-09-01 | gayatri@gmail.com | 1 | Jalan Sudirman |
+----+-----+-----+----+-----+-----+-----+-----+-----+
3 rows in set (0.000 sec)
```

5. Tampilkan data pelanggan yang lahirnya tahun 1998

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

```
MariaDB [dbtoko]> SELECT * FROM pelanggan WHERE YEAR(tgl_lahir)=1998;
+----+-----+-----+----+-----+-----+-----+-----+-----+
| id | kode | nama_pelanggan | jk | tmp_lahir | tgl_lahir | email | kartu_id | alamat |
+----+-----+-----+----+-----+-----+-----+-----+-----+
| 2 | 011102 | Pandan Wangi | P | Yogyakarta | 1998-08-07 | pandan@gmail.com | 2 | Jalan Malioboro |
+----+-----+-----+----+-----+-----+-----+-----+-----+
1 row in set (0.000 sec)
```

6. Tampilkan data pelanggan yang berulang tahun bulan agustus

```
SELECT * FROM pelanggan WHERE MONTH(tgl_lahir)=08;
```

```
MariaDB [dbtoko]> SELECT * FROM pelanggan WHERE MONTH(tgl_lahir)=08;
+----+-----+-----+----+-----+-----+-----+-----+-----+
| id | kode | nama_pelanggan | jk | tmp_lahir | tgl_lahir | email | kartu_id | alamat |
+----+-----+-----+----+-----+-----+-----+-----+-----+
| 2 | 011102 | Pandan Wangi | P | Yogyakarta | 1998-08-07 | pandan@gmail.com | 2 | Jalan Malioboro |
| 5 | 011105 | Pradana | L | Jakarta | 2001-08-01 | pradana@gmail.com | 2 | Jalan Kemang |
+----+-----+-----+----+-----+-----+-----+-----+-----+
2 rows in set (0.021 sec)
```

7. Tampilkan data pelanggan : nama, tmp\_lahir, tgl\_lahir dan umur (selisih tahun sekarang dikurang tahun kelahiran)

```
SELECT nama_pelanggan, tmp_lahir, tgl_lahir, (YEAR(NOW())-YEAR(tgl_lahir)) AS umur FROM
pelanggan;
```

```
MariaDB [dbtoko]> SELECT nama_pelanggan, tmp_lahir, tgl_lahir, (YEAR(NOW())-YEAR(tgl_lahir)) AS umur FROM pelanggan;
+-----+-----+-----+-----+
| nama_pelanggan | tmp_lahir | tgl_lahir | umur |
+-----+-----+-----+-----+
| Agung | Bandung | 1997-09-06 | 26 |
| Pandan Wangi | Yogyakarta | 1998-08-07 | 25 |
| Sekar | Kediri | 2001-09-08 | 22 |
| Suandi | Jakarta | 1997-09-08 | 26 |
| Pradana | Jakarta | 2001-08-01 | 22 |
| Gayatri Putri | Jakarta | 2002-09-01 | 21 |
+-----+-----+-----+-----+
6 rows in set (0.000 sec)
```

## SOAL 3.2

## 1. Berapa jumlah pelanggan yang tahun lahirnya 1998

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

```
MariaDB [dbtoko]> SELECT COUNT(*) AS jumlah_pelanggan FROM pelanggan WHERE YEAR(tgl_lahir) = 1998;
+-----+
| jumlah_pelanggan |
+-----+
|          1 |
+-----+
1 row in set (0.305 sec)
```

## 2. Berapa jumlah pelanggan perempuan yang tempat lahirnya di Jakarta

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

```
MariaDB [dbtoko]> SELECT COUNT(*) AS jumlah_pelanggan FROM pelanggan WHERE jk = 'P' AND tmp_lahir = 'Jakarta';
+-----+
| jumlah_pelanggan |
+-----+
|          1 |
+-----+
1 row in set (0.045 sec)
```

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

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

```
MariaDB [dbtoko]> SELECT SUM(stok) AS total_stok FROM produk WHERE harga_jual < 10000;
+-----+
| total_stok |
+-----+
|          5 |
+-----+
1 row in set (0.095 sec)
```

## 4. Ada berapa produk yang mempunyai kode awal K

```
SELECT COUNT(*) AS jumlah_produk FROM produk WHERE LEFT(kode, 1) = 'K';
```

```
MariaDB [dbtoko]> SELECT COUNT(*) AS jumlah_produk FROM produk WHERE LEFT(kode, 1) = 'K';
+-----+
| jumlah_produk |
+-----+
|          1 |
+-----+
1 row in set (0.002 sec)
```

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

```
SELECT AVG(harga_jual) AS rata_harga_jual FROM produk WHERE harga_jual > 1000000;
```

```
MariaDB [dbtoko]> SELECT AVG(harga_jual) AS rata_harga_jual FROM produk WHERE harga_jual > 1000000;
+-----+
| rata_harga_jual |
+-----+
|          3500000 |
+-----+
1 row in set (0.026 sec)
```

## 6. Tampilkan jumlah stok yang paling besar

```
SELECT MAX(stok) AS jumlah_stok_terbanyak FROM produk;
```

```
MariaDB [dbtoko]> SELECT MAX(stok) AS jumlah_stok_terbanyak FROM produk;
+-----+
| jumlah_stok_terbanyak |
+-----+
|                   10 |
+-----+
1 row in set (0.027 sec)
```

## 7. Ada berapa produk yang stoknya kurang dari minimal stok

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

```
MariaDB [dbtoko]> SELECT COUNT(*) AS jumlah_produk FROM produk WHERE stok < min_stok;
+-----+
| jumlah_produk |
+-----+
|             1 |
+-----+
1 row in set (0.000 sec)
```

## 8. Berapa total asset dari keseluruhan produk

```
SELECT SUM(harga_beli * stok) AS total_asset FROM produk;
```

```
MariaDB [dbtoko]> SELECT SUM(harga_beli * stok) AS total_asset FROM produk;
+-----+
| total_asset |
+-----+
|      73018000 |
+-----+
1 row in set (0.034 sec)
```

## 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;*

```
MariaDB [dbtoko]> SELECT id, nama, stok, IF(stok <= min_stok, 'segera belanja', 'stok aman') AS info_stok FROM produk;
```

id	nama	stok	info_stok
1	TV	3	stok aman
2	TV 21 Inch	10	stok aman
3	Kulkas	10	stok aman
4	Meja Makan	4	stok aman
5	Taro	3	stok aman
6	Teh Kotak	2	segera belanja

6 rows in set (0.029 sec)

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

*SELECT id, nama\_pelanggan, YEAR(CURDATE()) - YEAR(tgl\_lahir) AS umur,*  
*CASE*

*WHEN YEAR(CURDATE()) - YEAR(tgl\_lahir) < 17 THEN 'muda'*

*WHEN YEAR(CURDATE()) - YEAR(tgl\_lahir) BETWEEN 17 AND 55 THEN 'Dewasa'*

*ELSE 'Tua'*

*END AS kategori\_umur*

*FROM pelanggan;*

```
MariaDB [dbtoko]> SELECT id, nama_pelanggan, YEAR(CURDATE()) - YEAR(tgl_lahir) AS umur,
-> CASE
-> WHEN YEAR(CURDATE()) - YEAR(tgl_lahir) < 17 THEN 'muda'
-> WHEN YEAR(CURDATE()) - YEAR(tgl_lahir) BETWEEN 17 AND 55 THEN 'Dewasa'
-> ELSE 'Tua'
-> END AS kategori_umur
-> FROM pelanggan;
```

id	nama_pelanggan	umur	kategori_umur
1	Agung	26	Dewasa
2	Pandan Wangi	25	Dewasa
3	Sekar	22	Dewasa
4	Suandi	26	Dewasa
5	Pradana	22	Dewasa
6	Gayatri Putri	21	Dewasa

6 rows in set (0.013 sec)

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;
```

```
MariaDB [dbtoko]> 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	TV	DVD Player
2	TV02	TV 21 Inch	Tidak Ada
3	K001	Kulkas	Rice Cooker
4	M001	Meja Makan	Tidak Ada
5	T001	Taro	Tidak Ada
6	TK01	Teh Kotak	Tidak Ada

6 rows in set (0.001 sec)

#### SOAL 3.4

1. Tampilkan data statistik jumlah tempat lahir pelanggan

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

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

tmp_lahir	jumlah
Bandung	1
Jakarta	3
Kediri	1
Yogyakarta	1

4 rows in set (0.028 sec)

## 2. Tampilkan jumlah statistik produk berdasarkan jenis produk

*SELECT jenis\_produk\_id, COUNT(\*) as jumlah from produk GROUP BY jenis\_produk\_id;*

```
MariaDB [dbtoko]> SELECT jenis_produk_id, COUNT(*) as jumlah from produk GROUP BY jenis_produk_id;
+-----+-----+
| jenis_produk_id | jumlah |
+-----+-----+
| 1               | 3      |
| 2               | 1      |
| 3               | 1      |
| 4               | 1      |
+-----+-----+
4 rows in set (0.001 sec)
```

## 3. Tampilkan data pelanggan yang usianya dibawah rata usia pelanggan

*SELECT \* FROM pelanggan*

*WHERE YEAR(CURDATE()) - YEAR(tgl\_lahir) <*

*(SELECT AVG(YEAR(CURDATE()) - YEAR(tgl\_lahir)) FROM pelanggan);*

```
MariaDB [dbtoko]> SELECT * FROM pelanggan WHERE YEAR(CURDATE()) - YEAR(tgl_lahir) < (SELECT AVG(YEAR(CURDATE()) - YEAR(tgl_lahir)) FROM pelanggan);
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| id | kode | nama_pelanggan | jk | tmp_lahir | tgl_lahir | email | kartu_id | alamat |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 3 | 011103 | Sekar | P | Kediri | 2001-09-08 | sekan@gmail.com | 1 | Jalan Kediri Jaya |
| 5 | 011105 | Pradana | L | Jakarta | 2001-08-01 | pradana@gmail.com | 2 | Jalan Kemang |
| 6 | 011106 | Gayatri Putri | P | Jakarta | 2002-09-01 | gayatri@gmail.com | 1 | Jalan Sudirman |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
3 rows in set (0.054 sec)
```

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

*SELECT \* FROM produk*

*WHERE harga\_jual >*

*(SELECT AVG(harga\_jual) FROM produk);*

```
MariaDB [dbtoko]> 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 | TV | 3000000 | 4000000 | 3 | 2 | 1 |
| 2 | TV02 | TV 21 Inch | 2000000 | 3000000 | 10 | 3 | 1 |
| 3 | K001 | Kulkas | 4000000 | 5000000 | 10 | 3 | 1 |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
3 rows in set (0.001 sec)
```

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

*SELECT \* FROM pelanggan WHERE kartu\_id IN (SELECT id FROM kartu WHERE iuran > 90000);*

```
MariaDB [dbtoko]> SELECT * FROM pelanggan WHERE kartu_id IN (SELECT id FROM kartu WHERE iuran > 90000);
Empty set (0.001 sec)

MariaDB [dbtoko]> select * from kartu;
+----+-----+-----+-----+-----+
| id | kode | nama   | diskon | iuran |
+----+-----+-----+-----+
| 1  | 10111 | Gold   | 20000  | 2000  |
| 2  | 10112 | Silver | 15000  | 1500  |
| 3  | 10113 | platinum | 10000  | 1000  |
+----+-----+-----+-----+
3 rows in set (0.000 sec)
```

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

*SELECT COUNT(\*) AS jumlah, AVG(harga\_jual) AS rata\_harga FROM produk  
WHERE harga\_jual < (SELECT AVG(harga\_jual) FROM produk);*

```
MariaDB [dbtoko]> SELECT COUNT(*) AS jumlah, AVG(harga_jual) AS rata_harga FROM produk WHERE harga_jual < (SELECT AVG(harga_jual) FROM produk);
+-----+-----+
| jumlah | rata_harga |
+-----+-----+
| 3      | 669666.6666666666 |
+-----+-----+
1 row in set (0.032 sec)
```

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

*SELECT \* FROM pelanggan WHERE kartu\_id IN (SELECT id FROM kartu WHERE diskon > 0.03);*

```
MariaDB [dbtoko]> SELECT * FROM pelanggan WHERE kartu_id IN (SELECT id FROM kartu WHERE diskon > 0.03);
+----+-----+-----+-----+-----+-----+-----+-----+-----+
| id | kode | nama_pelanggan | jk | tmp_lahir | tgl_lahir | email                | kartu_id | alamat          |
+----+-----+-----+-----+-----+-----+-----+-----+-----+
| 1  | 011101 | Agung          | L  | Bandung  | 1997-09-06 | agung@gmail.com      | 1        | Jalan Braga    |
| 2  | 011102 | Pandan Wangi   | P  | Yogyakarta | 1998-08-07 | pandan@gmail.com     | 2        | Jalan Malioboro |
| 3  | 011103 | Sekar          | P  | Kediri    | 2001-09-08 | sekar@gmail.com       | 1        | Jalan Kediri Jaya |
| 4  | 011104 | Suandi         | L  | Jakarta   | 1997-09-08 | suandi@gmail.com     | 1        | Jalan Kediri Jaya |
| 5  | 011105 | Pradana        | L  | Jakarta   | 2001-08-01 | pradana@gmail.com    | 2        | Jalan Kemang    |
| 6  | 011106 | Gayatri Putri  | P  | Jakarta   | 2002-09-01 | gayatri@gmail.com    | 1        | Jalan Sudirman  |
+----+-----+-----+-----+-----+-----+-----+-----+-----+
6 rows in set (0.001 sec)
```