

Advanced SELECTs
Worksheet 3

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SOAL 3.1

1. Tampilkan produk yang asset nya diatas 20jt

MariaDB [dbtoko1]> SELECT * FROM produk WHERE harga_beli * stok > 20000000;

```
MariaDB [dbpossib7]> 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 (0.002 sec)
```

2. Tampilkan data produk beserta selisih stok dengan minimal stok

MariaDB [dbtoko1]> SELECT SUM(stok - min_stok) as selisih from produk;

```
MariaDB [dbpossib7]> SELECT SUM(stok - min_stok) as selisih from produk;
+-----+
| selisih |
+-----+
|      24 |
+-----+
1 row in set (0.001 sec)
```

3. Tampilkan total asset produk secara keseluruhan

MariaDB [dbtoko1]> SELECT sum(stok) as total_asset from produk;

```
MariaDB [dbpossib7]> SELECT sum(stok) as total_asset from produk;
+-----+
| total_asset |
+-----+
|          57 |
+-----+
1 row in set (0.000 sec)
```

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

MariaDB [dbtoko1]> SELECT * FROM pelanggan WHERE YEAR(tgl_lahir) BETWEEN 1980 AND 1990;

```
MariaDB [dbpossib7]> SELECT * FROM pelanggan WHERE YEAR(tgl_lahir) BETWEEN 1980 AND 1990;
Empty set (0.002 sec)
```

5. Tampilkan data pelanggan yang lahirnya tahun 1998

MariaDB [dbtoko1]> SELECT * FROM pelanggan WHERE YEAR(tgl_lahir)=1998;

```
MariaDB [dbpossib7]> SELECT * FROM pelanggan WHERE YEAR(tgl_lahir)=1998;
Empty set (0.000 sec)
```

6. Tampilkan data pelanggan yang berulang tahun bulan agustus

MariaDB [dbtoko1]> SELECT * FROM pelanggan WHERE MONTH(tgl_lahir)=08;

```
MariaDB [dbpossib7]> SELECT * FROM pelanggan WHERE MONTH(tgl_lahir)=08;
Empty set (0.001 sec)
```

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

MariaDB [dbtoko1]> SELECT nama, tmp_lahir, tgl_lahir, (YEAR(NOW())-YEAR(tgl_lahir)) AS umur FROM pelanggan;

```
MariaDB [dbpossib7]> 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 (0.000 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 [dbpossib7]> SELECT COUNT(*) AS jumlah_pelanggan
-> FROM pelanggan
-> WHERE YEAR(tgl_lahir) = 1998;
+-----+
| jumlah_pelanggan |
+-----+
|                0 |
+-----+
1 row in set (0.001 sec)
```

2. Berapa jumlah pelanggan perempuan yang tempat lahirnya di Jakarta

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

```
MariaDB [dbpossib7]> SELECT COUNT(*) AS jumlah_pelanggan_perempuan FROM pelanggan WHERE tmp_lahir = 'J
akarta' AND jk = 'P';
+-----+
| jumlah_pelanggan_perempuan |
+-----+
|                2 |
+-----+
1 row in set (0.000 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 [dbpossib7]> SELECT SUM(stok) AS total_stok FROM produk WHERE harga_jual < 10000;
+-----+
| total_stok |
+-----+
|        39 |
+-----+
1 row in set (0.000 sec)
```

4. Ada berapa produk yang mempunyai kode awal K

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

```
MariaDB [dbpossib7]> SELECT COUNT(*) AS jumlah_produk FROM produk WHERE kode LIKE '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_rata_harga FROM produk WHERE harga_jual > 1000000;

```
MariaDB [dbpossib7]> SELECT AVG(harga_jual) AS rata_rata_harga FROM produk WHERE harga_jual > 1000000
-> ;
+-----+
| rata_rata_harga |
+-----+
|          8374400 |
+-----+
1 row in set (0.001 sec)
```

6. Tampilkan jumlah stok yang paling besar

SELECT MAX(stok) AS stok_terbesar FROM produk;

```
MariaDB [dbpossib7]> SELECT MAX(stok) AS stok_terbesar FROM produk;
+-----+
| stok_terbesar |
+-----+
|             39 |
+-----+
1 row in set (0.000 sec)
```

7. Ada berapa produk yang stoknya kurang dari minimal stok

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

```
MariaDB [dbpossib7]> SELECT COUNT(*) AS produk_di_bawah_minimal FROM produk WHERE stok < min_stok;
+-----+
| produk_di_bawah_minimal |
+-----+
|              3 |
+-----+
1 row in set (0.000 sec)
```

8. Berapa total asset dari keseluruhan produk

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

```
MariaDB [dbpossib7]> SELECT SUM(stok * harga_beli) AS total_asset FROM produk;
+-----+
| total_asset |
+-----+
|    86578000 |
+-----+
1 row in set (0.000 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,
```

```
CASE
```

```
  WHEN stok <= min_stok THEN 'Segera Belanja'
```

```
  ELSE 'Stok Aman'
```

```
END AS status_stok
```

```
FROM produk;
```

```
MariaDB [dbpossib7]> SELECT id, nama, stok,
-> CASE
->   WHEN stok <= min_stok THEN 'Segera Belanja'
->   ELSE 'Stok Aman'
-> END 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 (0.000 sec)
```

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

```
SELECT id, nama, 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 [dbpossib7]> SELECT id, nama, 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	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	37	Dewasa
7	Dewi Gyat	36	Dewasa
8	Andre Haru	34	Dewasa
9	Ahmad Hasan	32	Dewasa
10	Cassanndra	34	Dewasa

```
10 rows in set (0.001 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 [dbpossib7]> 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 (0.000 sec)
```

SOAL 3.4

1. Tampilkan data statistik jumlah tempat lahir pelanggan

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

```
MariaDB [dbpossib7]> SELECT tmp_lahir, COUNT(*) AS jumlah_pelanggan FROM pelanggan GROUP BY tmp_lahir;
```

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

```
7 rows in set (0.001 sec)
```

2. Tampilkan jumlah statistik produk berdasarkan jenis produk

```
SELECT jenis_produk_id, COUNT(*) AS jumlah_produk FROM produk GROUP BY jenis_produk_id;
```

```
MariaDB [dbpossib7]> SELECT jenis_produk_id, COUNT(*) AS jumlah_produk FROM produk GROUP BY jenis_produk_id;
```

jenis_produk_id	jumlah_produk
1	3
2	1
4	2
5	3

```
4 rows in set (0.000 sec)
```

3. Tampilkan data pelanggan yang usianya dibawah rata usia pelanggan

```
SELECT id, nama, YEAR(CURDATE()) - YEAR(tgl_lahir) AS usia FROM pelanggan WHERE  
YEAR(CURDATE()) - YEAR(tgl_lahir) < (SELECT AVG(YEAR(CURDATE()) - YEAR(tgl_lahir)) FROM  
pelanggan);
```

```
MariaDB [dbpossib7]> SELECT id, nama, YEAR(CURDATE()) - YEAR(tgl_lahir) AS usia FROM pelanggan WHERE YEAR(CURDATE()) - YEAR(tgl_lahir) < (SELECT AVG(YEAR(CURDATE()) - YEAR(tgl_lahir)) FROM pelanggan);
```

id	nama	usia
1	Agung Sedayu	14
6	Gayatri Dwi	37
7	Dewi Giat	36
8	Andre Haru	34
9	Ahmad Hasan	32
10	Cassandra	34

```
6 rows in set (0.001 sec)
```


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

```
SELECT id, nama, harga_jual FROM produk WHERE harga_jual > (SELECT AVG(harga_jual) FROM produk);
```

```
MariaDB [dbpossib7]> SELECT id, nama, harga_jual FROM produk WHERE harga_jual > (SELECT AVG(harga_jual) FROM produk);
```

id	nama	harga_jual
2	Televisi 40 inch	7737600
6	PC Desktop HP	9600000
8	Notebook Acer	10800000
9	Notebook Lenovo	12000000

```
4 rows in set (0.001 sec)
```

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

```
SELECT pelanggan.id, pelanggan.nama
FROM pelanggan
INNER JOIN kartu ON pelanggan.kartu_id = kartu.id
WHERE kartu.iuran > 90000;
```

```
MariaDB [dbpossib7]> SELECT pelanggan.id, pelanggan.nama
-> FROM pelanggan
-> INNER JOIN kartu ON pelanggan.kartu_id = kartu.id
-> WHERE kartu.iuran > 90000;
```

id	nama
1	Agung Sedayu
2	Pandan Wangi
3	Sekar Mirah
5	Pradabashu
6	Gayatri Dwi
7	Dewi Gyat
10	Cassanndra

```
7 rows in set (0.001 sec)
```

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);
```

```
MariaDB [dbpossib7]> 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 (0.000 sec)
```

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

```
SELECT pelanggan.id, pelanggan.nama
```

```
FROM pelanggan
```

```
INNER JOIN kartu ON pelanggan.kartu_id = kartu.id
```

```
WHERE kartu.diskon > 3;
```

```
MariaDB [dbpossib7]> SELECT pelanggan.id, pelanggan.nama
-> FROM pelanggan
-> INNER JOIN kartu ON pelanggan.kartu_id = kartu.id
-> WHERE kartu.diskon > 3;
Empty set (0.000 sec)
```