Priyan Fadhil Supriyadi

1. Insert
    1. Insert 5 operators pada table operators.

```
MariaDB [(none)]> USE alterra
Database changed
MariaDB [alterra]> INSERT INTO operators(id, name) VALUES
    -> (1, "Telkomsel"),
    -> (2, "By-U"),
    -> (3, "Indosat"),
    -> (4, "XL"),
    -> (5, "Axis");
Query OK, 5 rows affected (0.010 sec)
Records: 5  Duplicates: 0  Warnings: 0

MariaDB [alterra]>
```

    2. Insert 3 product type.

```
MariaDB [alterra]> INSERT INTO product_types(id, name) VALUES
    -> (1, "Paket Data"),
    -> (2, "Pulsa"),
    -> (3, "Voucher Game");
Query OK, 3 rows affected (0.002 sec)
Records: 3  Duplicates: 0  Warnings: 0

MariaDB [alterra]>
```

    3. Insert 2 product dengan product type id = 1, dan operators id = 3.
    4. Insert 3 product dengan product type id = 2, dan operators id = 1.
    5. Insert 3 product dengan product type id = 3, dan operators id = 4.

```
MariaDB [alterra]> INSERT INTO products(id, product_type_id, operator_id, code, name, status) VALUES
    -> (1, 1, 3, "113", "Paket Data Indosat Seminggu", 1),
    -> (2, 1, 3, "213", "Paket Data Indosat Sebulan", 1),
    -> (3, 2, 1, "221", "Pulsa Telkomsel Combo Sakti", 1),
    -> (4, 2, 1, "421", "Pulsa Telkomsel Loop", 1),
    -> (5, 2, 1, "521", "Pulsa Telkomsel Darurat", 1),
    -> (6, 3, 4, "634", "Voucher Game XL Mobile Legend", 1),
    -> (7, 3, 4, "734", "Voucher Game XL Free Fire", 1),
    -> (8, 3, 4, "834", "Voucher Game XL PUBG", 1);
Query OK, 8 rows affected (0.010 sec)
Records: 8  Duplicates: 0  Warnings: 0

MariaDB [alterra]>
```

    6. Insert product description pada setiap product.

```
MariaDB [alterra]> INSERT INTO product_descriptions(id, description) VALUES
    -> (1, "description 1"),
    -> (2, "description 2"),
    -> (3, "description 3"),
    -> (4, "description 4"),
    -> (5, "description 5"),
    -> (6, "description 6"),
    -> (7, "description 7"),
    -> (8, "description 8");
Query OK, 8 rows affected (0.003 sec)
Records: 8  Duplicates: 0  Warnings: 0

MariaDB [alterra]>
```

    7. Insert 3 payment methods.

```
MariaDB [alterra]> INSERT INTO  payment_methods(id, name, status) VALUES
    -> (1, "E-Wallet", 1),
    -> (2, "ATM", 1),
    -> (3, "Indomaret", 1);
Query OK, 3 rows affected (0.010 sec)
Records: 3  Duplicates: 0  Warnings: 0

MariaDB [alterra]>
```

8. Insert 5 user pada tabel user.

```
MariaDB [alterra]> INSERT INTO users(id, status, dob, gender) VALUES
    -> (1, 1, '2001-05-01', 'M'),
    -> (2, 2, '2002-05-02', 'M'),
    -> (3, 3, '2001-04-03', 'F'),
    -> (4, 4, '2002-02-04', 'F'),
    -> (5, 5, '2002-09-05', 'F');
Query OK, 5 rows affected (0.010 sec)
Records: 5  Duplicates: 0  Warnings: 0

MariaDB [alterra]>
```

9. Insert 3 transaksi di masing-masing user. (soal berlanjut ke soal 1.j)

```
MariaDB [alterra]> INSERT INTO transactions(id, user_id, payment_method_id, total_price, total_qty, status)
 VALUES
    -> (1, 1, 1, 6000, 3, 1),
    -> (2, 1, 1, 6000, 3, 1),
    -> (3, 1, 1, 6000, 3, 1),
    -> (4, 2, 2, 6000, 3, 1),
    -> (5, 2, 2, 6000, 3, 1),
    -> (6, 2, 2, 6000, 3, 1),
    -> (7, 3, 3, 6000, 3, 1),
    -> (8, 3, 3, 6000, 3, 1),
    -> (9, 3, 3, 6000, 3, 1),
    -> (10, 4, 1, 6000, 3, 1),
    -> (11, 4, 1, 6000, 3, 1),
    -> (12, 4, 1, 6000, 3, 1),
    -> (13, 5, 1, 6000, 3, 1),
    -> (14, 5, 1, 6000, 3, 1),
    -> (15, 5, 1, 6000, 3, 1);
Query OK, 15 rows affected (0.007 sec)
Records: 15  Duplicates: 0  Warnings: 0

MariaDB [alterra]>
```

10. Insert 3 product di masing-masing transaksi.

```
MariaDB [alterra]> INSERT INTO `alterra`.`transaction_details` (`transaction_id`,
 `product_id`, `status`, `qty`, `price`) VALUES
    -> ('1', '1', '1', '1', '2000'),
    -> ('1', '2', '1', '1', '2000'),
    -> ('1', '3', '1', '1', '2000'),
    -> ('2', '4', '1', '1', '2000'),
    -> ('2', '5', '1', '1', '2000'),
    -> ('2', '6', '1', '1', '2000'),
    -> ('3', '6', '1', '1', '2000'),
    -> ('3', '7', '1', '1', '2000'),
    -> ('3', '8', '1', '1', '2000'),
    -> ('4', '6', '1', '1', '2000'),
    -> ('4', '5', '1', '1', '2000'),
    -> ('4', '4', '1', '1', '2000'),
    -> ('5', '6', '1', '1', '2000'),
    -> ('5', '4', '1', '1', '2000'),
    -> ('5', '7', '1', '1', '2000'),
    -> ('6', '3', '1', '1', '2000'),
    -> ('6', '2', '1', '1', '2000'),
    -> ('6', '7', '1', '1', '2000'),
    -> ('7', '4', '1', '1', '2000'),
    -> ('7', '8', '1', '1', '2000'),
    -> ('7', '2', '1', '1', '2000'),
    -> ('8', '1', '1', '1', '2000'),
    -> ('8', '4', '1', '1', '2000'),
    -> ('8', '7', '1', '1', '2000'),
    -> ('9', '3', '1', '1', '2000'),
    -> ('9', '8', '1', '1', '2000'),
    -> ('9', '4', '1', '1', '2000'),
    -> ('10', '3', '1', '1', '2000'),
    -> ('10', '5', '1', '1', '2000'),
    -> ('10', '8', '1', '1', '2000'),
    -> ('11', '8', '1', '1', '2000'),
    -> ('11', '4', '1', '1', '2000'),
    -> ('11', '2', '1', '1', '2000'),
    -> ('12', '2', '1', '1', '2000'),
    -> ('12', '4', '1', '1', '2000'),
    -> ('12', '5', '1', '1', '2000'),
    -> ('13', '7', '1', '1', '2000'),
    -> ('13', '5', '1', '1', '2000'),
    -> ('13', '8', '1', '1', '2000'),
    -> ('14', '3', '1', '1', '2000'),
    -> ('14', '7', '1', '1', '2000'),
    -> ('14', '2', '1', '1', '2000'),
    -> ('15', '4', '1', '1', '2000'),
    -> ('15', '6', '1', '1', '2000'),
    -> ('15', '7', '1', '1', '2000');
Query OK, 45 rows affected (0.009 sec)
Records: 45  Duplicates: 0  Warnings: 0

MariaDB [alterra]>
```

2. Select
    1. Tampilkan nama user / pelanggan dengan gender Laki-laki / M.
    * Karena pada arsitektur entitas user tidak memiliki kolom name maka saya akan menggantinya dengan kolom status, sehingga :

```
MariaDB [alterra]> SELECT status FROM users WHERE gender='M';
+--------+
| status |
+--------+
|      1 |
|      2 |
+--------+
2 rows in set (0.000 sec)

MariaDB [alterra]>
```

    2. Tampilkan product dengan id = 3.

```
MariaDB [alterra]> SELECT * FROM products WHERE id=3;
+----+-----------------+-------------+------+---------------------------+--------+---------------------+---------------------+
| id | product_type_id | operator_id | code | name                      | status | created_at          | updated_at          |
+----+-----------------+-------------+------+---------------------------+--------+---------------------+---------------------+
|  3 |               2 |           1 | 221  | Pulsa Telkomsel Combo Sakti |      1 | 2022-03-16 01:45:16 | 2022-03-16 01:45:16 |
+----+-----------------+-------------+------+---------------------------+--------+---------------------+---------------------+
1 row in set (0.000 sec)

MariaDB [alterra]>
```

    3. Tampilkan data pelanggan yang created_at dalam range 7 hari kebelakang dan mempunyai nama mengandung kata ‘a’.
    * Karena pada arsitektur entitas user tidak memiliki kolom name maka saya akan menggantinya dengan kolom dob mengandung ‘001’, sehingga :

```
MariaDB [alterra]> SELECT * FROM users WHERE
    -> date(created_at) >= CURDATE() - interval 7 day AND
    -> dob LIKE '%001%';
+----+--------+------------+--------+---------------------+---------------------+
| id | status | dob        | gender | created_at          | updated_at          |
+----+--------+------------+--------+---------------------+---------------------+
|  1 |      1 | 2001-05-01 | M      | 2022-03-16 01:52:49 | 2022-03-16 01:52:49 |
|  3 |      3 | 2001-04-03 | F      | 2022-03-16 01:52:49 | 2022-03-16 01:52:49 |
+----+--------+------------+--------+---------------------+---------------------+
2 rows in set (0.004 sec)

MariaDB [alterra]>
```

    4. Hitung jumlah user / pelanggan dengan status gender Perempuan.

```
MariaDB [alterra]> SELECT COUNT(gender) jumlah_perempuan FROM users WHERE
    -> gender = 'F';
+-----------------+
| jumlah_perempuan |
+-----------------+
|               3 |
+-----------------+
1 row in set (0.000 sec)

MariaDB [alterra]>
```

5. Tampilkan data pelanggan dengan urutan sesuai nama abjad
   * Karena pada arsitektur entitas user tidak memiliki kolom name maka saya akan menggantinya dengan kolom status, sehingga :

```
MariaDB [alterra]> SELECT * FROM users
    -> ORDER BY status
    -> ;
+----+--------+------------+--------+---------------------+---------------------+
| id | status | dob        | gender | created_at          | updated_at          |
+----+--------+------------+--------+---------------------+---------------------+
|  1 |      1 | 2001-05-01 | M      | 2022-03-16 01:52:49 | 2022-03-16 01:52:49 |
|  2 |      2 | 2002-05-02 | M      | 2022-03-16 01:52:49 | 2022-03-16 01:52:49 |
|  3 |      3 | 2001-04-03 | F      | 2022-03-16 01:52:49 | 2022-03-16 01:52:49 |
|  4 |      4 | 2002-02-04 | F      | 2022-03-16 01:52:49 | 2022-03-16 01:52:49 |
|  5 |      5 | 2002-09-05 | F      | 2022-03-16 01:52:49 | 2022-03-16 01:52:49 |
+----+--------+------------+--------+---------------------+---------------------+
5 rows in set (0.000 sec)

MariaDB [alterra]>
```

6. Tampilkan 5 data pada data product

```
MariaDB [alterra]> SELECT * FROM products LIMIT 5;
+----+-----------------+-------------+------+---------------------------+--------+---------------------+---------------------+
| id | product_type_id | operator_id | code | name                      | status | created_at          | updated_at          |
+----+-----------------+-------------+------+---------------------------+--------+---------------------+---------------------+
|  1 |               1 |           3 | 113  | Paket Data Indosat Seminggu |      1 | 2022-03-16 01:45:16 | 2022-03-16 01:45:16 |
|  2 |               1 |           3 | 213  | Paket Data Indosat Sebulan  |      1 | 2022-03-16 01:45:16 | 2022-03-16 01:45:16 |
|  3 |               2 |           1 | 221  | Pulsa Telkomsel Combo Sakti |      1 | 2022-03-16 01:45:16 | 2022-03-16 01:45:16 |
|  4 |               2 |           1 | 421  | Pulsa Telkomsel Loop        |      1 | 2022-03-16 01:45:16 | 2022-03-16 01:45:16 |
|  5 |               2 |           1 | 521  | Pulsa Telkomsel Darurat     |      1 | 2022-03-16 01:45:16 | 2022-03-16 01:45:16 |
+----+-----------------+-------------+------+---------------------------+--------+---------------------+---------------------+
5 rows in set (0.001 sec)

MariaDB [alterra]>
```

3. Update
   1. Ubah data product id 1 dengan nama '*product dummy*'.

```
MariaDB [alterra]> UPDATE products
    -> SET name = 'product dummy'
    -> WHERE id = 1;
Query OK, 1 row affected (0.005 sec)
Rows matched: 1  Changed: 1  Warnings: 0

MariaDB [alterra]>
```

   2. Update qty = 3 pada transaction detail dengan product id 1.

```
MariaDB [alterra]> UPDATE transaction_details
    -> SET qty = 3
    -> WHERE product_id = 1;
Query OK, 2 rows affected (0.004 sec)
Rows matched: 2  Changed: 2  Warnings: 0

MariaDB [alterra]>
```

4. Delete
   1. Delete data pada tabel product dengan id 1.
   DELETE FROM products where id=1;

   2. Delete pada pada tabel product dengan product type id 1.
   DELETE FROM products where product_type_id=1;

1. Gabungkan data transaksi dari user id 1 dan user id 2.

```
MariaDB [alterra]> SELECT * FROM transactions WHERE user_id = 1 or user_id = 2;
+----+---------+------------------+--------+-----------+-------------+---------------------+---------------------+
| id | user_id | payment_method_id | status | total_qty | total_price | created_at          | updated_at          |
+----+---------+------------------+--------+-----------+-------------+---------------------+---------------------+
|  1 |       1 |                1 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 |
|  2 |       1 |                1 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 |
|  3 |       1 |                1 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 |
|  4 |       2 |                2 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 |
|  5 |       2 |                2 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 |
|  6 |       2 |                2 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 |
+----+---------+------------------+--------+-----------+-------------+---------------------+---------------------+
6 rows in set (0.000 sec)

MariaDB [alterra]>
```

2. Tampilkan jumlah harga transaksi user id 1.

```
MariaDB [alterra]> SELECT SUM(total_price) FROM transactions WHERE user_id = 1;
+------------------+
| SUM(total_price) |
+------------------+
|         18000.00 |
+------------------+
1 row in set (0.001 sec)

MariaDB [alterra]>
```

3. Tampilkan total transaksi dengan product type 2.

```
MariaDB [alterra]> SELECT COUNT(user_id) FROM transactions t
    -> INNER JOIN transaction_details d ON t.id = d.transaction_id
    -> INNER JOIN products p ON d.product_id = p.id
    -> WHERE product_type_id = 2
    -> ;
+-----------------+
| COUNT(user_id) |
+-----------------+
|              19 |
+-----------------+
1 row in set (0.001 sec)

MariaDB [alterra]>
```

4. Tampilkan semua field table product dan field name table product type yang saling berhubungan.

```
MariaDB [alterra]> SELECT p.*, pt.name FROM products as p
    -> INNER JOIN product_types as pt
    -> ON p.id=pt.id;
+----+-----------------+-------------+------+---------------------------+--------+---------------------+---------------------+-------------+
| id | product_type_id | operator_id | code | name                      | status | created_at          | updated_at          | name        |
+----+-----------------+-------------+------+---------------------------+--------+---------------------+---------------------+-------------+
|  1 |               1 |           3 | 113  | product dummy             |      1 | 2022-03-16 01:45:16 | 2022-03-16 01:45:16 | Paket Data  |
|  2 |               1 |           3 | 213  | Paket Data Indosat Sebulan |      1 | 2022-03-16 01:45:16 | 2022-03-16 01:45:16 | Pulsa       |
|  3 |               2 |           1 | 221  | Pulsa Telkomsel Combo Sakti |      1 | 2022-03-16 01:45:16 | 2022-03-16 01:45:16 | Voucher Game |
+----+-----------------+-------------+------+---------------------------+--------+---------------------+---------------------+-------------+
3 rows in set (0.001 sec)

MariaDB [alterra]>
```

5. Tampilkan semua field table transaction, field name table product dan field name table user.
   * Karena pada arsitektur entitas user tidak memiliki kolom name maka saya akan menggantinya dengan kolom status, sehingga :

```
MariaDB [alterra]> SELECT t.*, p.name, u.status FROM products as p
    -> INNER JOIN  transaction_details as td
    -> ON td.product_id=p.id
    -> INNER JOIN transactions as t
    -> ON t.id = td.transaction_id
    -> INNER JOIN users as u
    -> ON u.id = t.user_id;
+----+---------+-------------------+--------+-----------+-------------+---------------------+---------------------+------------------------------+--------+
| id | user_id | payment_method_id | status | total_qty | total_price | created_at          | updated_at          | name                         | status |
+----+---------+-------------------+--------+-----------+-------------+---------------------+---------------------+------------------------------+--------+
|  1 |       1 |                 1 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | product dummy                |      1 |
|  1 |       1 |                 1 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Paket Data Indosat Sebulan   |      1 |
|  1 |       1 |                 1 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Pulsa Telkomsel Combo Sakti  |      1 |
|  2 |       1 |                 1 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Pulsa Telkomsel Loop         |      1 |
|  2 |       1 |                 1 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Pulsa Telkomsel Darurat      |      1 |
|  2 |       1 |                 1 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Voucher Game XL Mobile Legend |      1 |
|  3 |       1 |                 1 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Voucher Game XL Mobile Legend |      1 |
|  3 |       1 |                 1 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Voucher Game XL Free Fire    |      1 |
|  3 |       1 |                 1 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Voucher Game XL PUBG         |      1 |
|  4 |       2 |                 2 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Voucher Game XL Mobile Legend |      2 |
|  4 |       2 |                 2 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Pulsa Telkomsel Darurat      |      2 |
|  4 |       2 |                 2 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Pulsa Telkomsel Loop         |      2 |
|  5 |       2 |                 2 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Voucher Game XL Mobile Legend |      2 |
|  5 |       2 |                 2 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Pulsa Telkomsel Loop         |      2 |
|  5 |       2 |                 2 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Voucher Game XL Free Fire    |      2 |
|  6 |       2 |                 2 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Pulsa Telkomsel Combo Sakti  |      2 |
|  6 |       2 |                 2 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Paket Data Indosat Sebulan   |      2 |
|  6 |       2 |                 2 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Voucher Game XL Free Fire    |      2 |
|  7 |       3 |                 3 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Pulsa Telkomsel Loop         |      3 |
|  7 |       3 |                 3 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Voucher Game XL PUBG         |      3 |
|  7 |       3 |                 3 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Paket Data Indosat Sebulan   |      3 |
|  8 |       3 |                 3 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | product dummy                |      3 |
|  8 |       3 |                 3 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Pulsa Telkomsel Loop         |      3 |
|  8 |       3 |                 3 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Voucher Game XL Free Fire    |      3 |
|  9 |       3 |                 3 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Pulsa Telkomsel Combo Sakti  |      3 |
|  9 |       3 |                 3 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Voucher Game XL PUBG         |      3 |
|  9 |       3 |                 3 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Pulsa Telkomsel Loop         |      3 |
| 10 |       4 |                 1 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Pulsa Telkomsel Combo Sakti  |      4 |
| 10 |       4 |                 1 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Pulsa Telkomsel Darurat      |      4 |
| 10 |       4 |                 1 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Voucher Game XL PUBG         |      4 |
| 11 |       4 |                 1 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Voucher Game XL PUBG         |      4 |
| 11 |       4 |                 1 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Pulsa Telkomsel Loop         |      4 |
| 11 |       4 |                 1 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Paket Data Indosat Sebulan   |      4 |
| 12 |       4 |                 1 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Paket Data Indosat Sebulan   |      4 |
| 12 |       4 |                 1 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Pulsa Telkomsel Loop         |      4 |
| 12 |       4 |                 1 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Pulsa Telkomsel Darurat      |      4 |
| 13 |       5 |                 1 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Voucher Game XL Free Fire    |      5 |
| 13 |       5 |                 1 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Pulsa Telkomsel Darurat      |      5 |
| 13 |       5 |                 1 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Voucher Game XL PUBG         |      5 |
| 14 |       5 |                 1 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Pulsa Telkomsel Combo Sakti  |      5 |
| 14 |       5 |                 1 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Voucher Game XL Free Fire    |      5 |
| 14 |       5 |                 1 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Paket Data Indosat Sebulan   |      5 |
| 15 |       5 |                 1 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Pulsa Telkomsel Loop         |      5 |
| 15 |       5 |                 1 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Voucher Game XL Mobile Legend |      5 |
| 15 |       5 |                 1 | 1      |         3 |     6000.00 | 2022-03-16 01:57:28 | 2022-03-16 01:57:28 | Voucher Game XL Free Fire    |      5 |
+----+---------+-------------------+--------+-----------+-------------+---------------------+---------------------+------------------------------+--------+
45 rows in set (0.001 sec)

MariaDB [alterra]>
```

6. Buat function setelah data transaksi dihapus maka transaction detail terhapus juga dengan transaction id yang dimaksud.

```
DELIMITER $$
CREATE TRIGGER delete_transactions
AFTER DELETE ON transactions FOR EACH ROW
BEGIN
DECLARE v_transaction_id INT;
SET v_transaction_id=OLD.id;
DELETE FROM transactoin_details WHERE transaction_id = v_transaction_id;
END$$
DELIMITER ;
```

7. Buat function setelah data transaksi detail dihapus maka data total_qty terupdate berdasarkan qty data transaction id yang dihapus.

```
DELIMITER $$
CREATE TRIGGER delete_transaction_details
AFTER DELETE ON transaction_details FOR EACH ROW
BEGIN
DECLARE v_total_qty INT;
DECLARE v_id INT;
SET v_id = OLD.transaction_id;
SELECT SUM(qty) INTO v_total_qty FROM transactoin_details WHERE transaction_id =
v_id;
```

```
UPDATE transactions
SET total_qty = v_total_qty
WHERE transactions.id = v_id;
END$$
DELIMITER ;
```

8. Tampilkan data products yang tidak pernah ada di tabel transaction_details dengan sub-query.

```
MariaDB [alterra]> SELECT * FROM products WHERE id NOT IN(SELECT product_id FROM transaction_details);
Empty set (0.002 sec)

MariaDB [alterra]>
```