Nama : Adridinan Najmi Faza
NIM : H1D025059
Shift Awal/Akhir : B/H

A. Buatlah query sebagai Berikut

1. Join 2 Table clause where

```
SELECT
  -> a.cust_name,
  -> b.order_num,
  -> b.order_date
  -> FROM
  -> customers a,
  -> orders b
  -> WHERE
  -> a.cust_id = b.cust_id;
4 rows in set (0.001 sec)
```

```
MariaDB [orderentry]> SELECT
    -> a.cust_name,
    -> b.order_num,
    -> b.order_date
    -> FROM
    -> customers a,
    -> orders b
    -> WHERE
    -> a.cust_id = b.cust_id;
+----------------+-----------+------------+
| cust_name      | order_num | order_date |
+----------------+-----------+------------+
| Mouse House    |     20005 | 2005-09-01 |
| Mouse House    |     20006 | 2005-09-28 |
| yosemite place |     20007 | 2005-09-30 |
| wascals        |     20008 | 2005-08-10 |
+----------------+-----------+------------+
4 rows in set (0.001 sec)
```

2. Query dengan join on dari 3 tabel

```
MariaDB [orderentry]> SELECT
  -> a.cust_name,
  -> b.order_date,
  -> c.quantitiy
  -> FROM
  -> customers  a,
  -> orders b,
  -> orderitems c
  -> WHERE
  -> a.cust_id = b.cust_id and
  -> b.order_num = c.order_num;
```

```
MariaDB [orderentry]> SELECT
    -> a.cust_name,
    -> b.order_date,
    -> c.quantitiy
    -> FROM
    -> customers  a,
    -> orders b,
    -> orderitems c
    -> WHERE
    -> a.cust_id = b.cust_id and
    -> b.order_num = c.order_num;
+----------------+------------+-----------+
| cust_name      | order_date | quantitiy |
+----------------+------------+-----------+
| Mouse House    | 2005-09-01 |        10 |
| Mouse House    | 2005-09-01 |         3 |
| Mouse House    | 2005-09-01 |         5 |
| Mouse House    | 2005-09-28 |         1 |
| wascals        | 2005-08-10 |       100 |
| yosemite place | 2005-09-30 |         1 |
+----------------+------------+-----------+
6 rows in set (0.004 sec)
```

3. Right Join

MariaDB [orderentry]> select a.cust_name, b.order_num, b.order_date from customers a right join orders b on a.cust_id=b.cust_id;

```
MariaDB [orderentry]> select a.cust_name, b.order_num, b.order_date from customers a right join orders b on a.cust_id=b.cust_id;
+----------------+-----------+------------+
| cust_name      | order_num | order_date |
+----------------+-----------+------------+
| Mouse House    |     20005 | 2005-09-01 |
| Mouse House    |     20006 | 2005-09-28 |
| yosemite place |     20007 | 2005-09-30 |
| wascals        |     20008 | 2005-08-10 |
+----------------+-----------+------------+
4 rows in set (0.010 sec)
```

4. Left Join

MariaDB [orderentry]> select a.cust_name, b.order_num, b.order_date from customers a left join orders b on a.cust_id=b.cust_id;

```
MariaDB [orderentry]> select a.cust_name, b.order_num, b.order_date from customers a left join orders b on a.cust_id=b.cust_id;
+----------------+-----------+------------+
| cust_name      | order_num | order_date |
+----------------+-----------+------------+
| Mouse House    |     20005 | 2005-09-01 |
| Mouse House    |     20006 | 2005-09-28 |
| yosemite place |     20007 | 2005-09-30 |
| wascals        |     20008 | 2005-08-10 |
| e fudd         |      NULL | NULL       |
+----------------+-----------+------------+
5 rows in set (0.001 sec)
```

5. Self Join

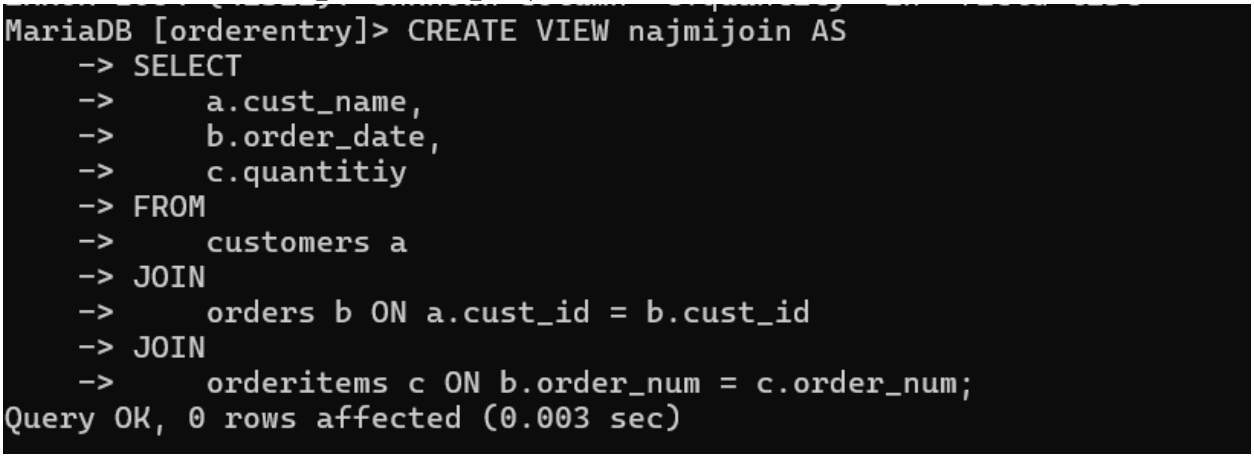
MariaDB [orderentry]> select a. vend_name, b. vend_state, 'Negaranya', b.vend_country from vendors a inner join vendors b on a.vend_id=b.vend_id;

```
MariaDB [orderentry]> select a. vend_name, b. vend_state, 'Negaranya', b.vend_country from vendors a inner join vendors b on a.vend_id=b.vend_id;
+---------------+------------+-----------+--------------+
| vend_name     | vend_state | Negaranya | vend_country |
+---------------+------------+-----------+--------------+
| Anvils R Us   | MI         | Negaranya | USA          |
| LT Supplies   | OH         | Negaranya | USA          |
| ACME          | CA         | Negaranya | USA          |
| Furball Inc.  | NY         | Negaranya | USA          |
| Jet Set       | NULL       | Negaranya | England      |
| Jouets Et Ours | NULL      | Negaranya | France       |
+---------------+------------+-----------+--------------+
6 rows in set (0.000 sec)
```

6. View

MariaDB [orderentry]> CREATE VIEW najmijoin AS

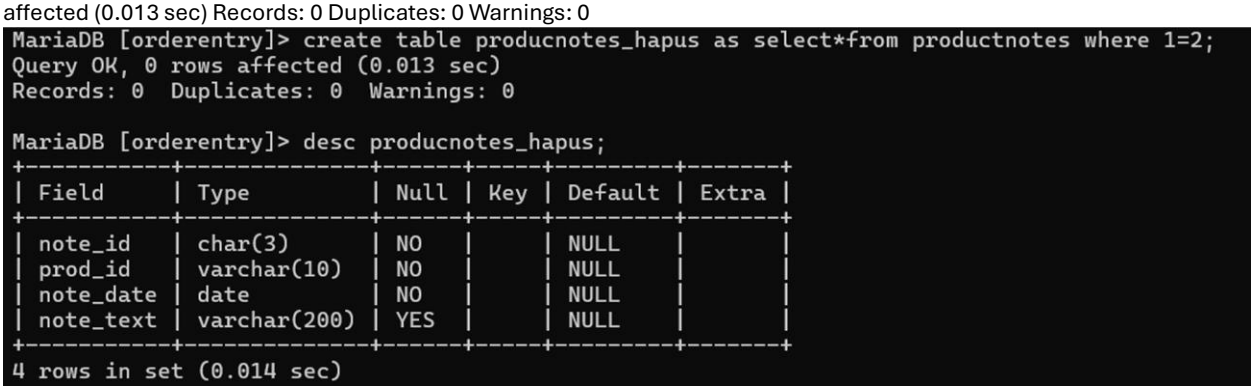
```
MariaDB [orderentry]> CREATE VIEW najmijoin AS
-> SELECT
->    a.cust_name,
->    b.order_date,
->    c.quantitiy
-> FROM
->    customers a
-> JOIN
->    orders b ON a.cust_id = b.cust_id
-> JOIN
->    orderitems c ON b.order_num = c.order_num;
```



B. Buatlah triger after delete untuk salah satu table di order entry. Serta tunjukkan hasil akibat penerapan trigger.

1. Membuat tabel (trash bin)

MariaDB [orderentry]> create table producnotes_hapus as select*from productnotes where 1=2; Query OK, 0 rows affected (0.013 sec) Records: 0 Duplicates: 0 Warnings: 0



2. **Tambahkan field**

Tambahkan kolom tgl_hapus dan user untuk merekam kapan data dihapus dan siapa yang menghapus

MariaDB [orderentry]> desc productnotes_hapus;

```
MariaDB [orderentry]> desc productnotes_hapus;
+-----------+--------------+------+-----+---------+-------+
| Field     | Type         | Null | Key | Default | Extra |
+-----------+--------------+------+-----+---------+-------+
| note_id   | char(3)      | NO   |     | NULL    |       |
| prod_id   | varchar(10)  | NO   |     | NULL    |       |
| note_date | date         | NO   |     | NULL    |       |
| note_text | varchar(200) | YES  |     | NULL    |       |
| tgl_hapus | date         | YES  |     | NULL    |       |
| name_id   | varchar(30)  | YES  |     | NULL    |       |
+-----------+--------------+------+-----+---------+-------+
6 rows in set (0.046 sec)
```

3. **Membuat trigger untuk eksekusi jika terjadi penghapusan pada tabel**

MariaDB [orderentry]> DELIMITER $$
MariaDB [orderentry]>
CREATE TRIGGER productnotes_hapus after delete
-> ON productnotes for each row
-> BEGIN
-> INSERT INTO productnotes_hapus
-> (note_id,
-> prod_id,
-> note_date,
-> note_text,
-> tgl_hapus,
-> name_id
->)
-> VALUES
-> (OLD.note_id,
-> OLD.prod_id,
-> OLD.note_date,
-> OLD.note_text,
-> SYSDATE(),
-> CURRENT_USER
->); -> end $$ Query OK, 0 rows affected (0.051 sec)
MariaDB [orderentry]> DELIMITER ;

```
MariaDB [orderentry]> DELIMITER $$
MariaDB [orderentry]>
MariaDB [orderentry]> CREATE TRIGGER productnotes_hapus after delete
    -> ON productnotes for each row
    -> BEGIN
    -> INSERT INTO productnotes_hapus
    ->        (        note_id,
    ->                 prod_id,
    ->                 note_date,
    ->                 note_text,
    ->                 tgl_hapus,
    ->                 name_id
    ->        )
    -> VALUES
    ->        (        OLD.note_id,
    ->                 OLD.prod_id,
    ->                 OLD.note_date,
    ->                 OLD.note_text,
    ->                 SYSDATE(),
    ->                 CURRENT_USER
    ->        );
    -> end $$
Query OK, 0 rows affected (0.051 sec)

MariaDB [orderentry]> DELIMITER ;
```

4. **Deskripsikan tabel (trashbin) yang udah dibuat sebelumnya**

MariaDB [orderentry]> desc productnotes_hapus;

```
MariaDB [orderentry]> desc productnotes_hapus;
+-----------+--------------+------+-----+---------+-------+
| Field     | Type         | Null | Key | Default | Extra |
+-----------+--------------+------+-----+---------+-------+
| note_id   | char(3)      | NO   |     | NULL    |       |
| prod_id   | varchar(10)  | NO   |     | NULL    |       |
| note_date | date         | NO   |     | NULL    |       |
| note_text | varchar(200) | YES  |     | NULL    |       |
| tgl_hapus | date         | YES  |     | NULL    |       |
| name_id   | varchar(30)  | YES  |     | NULL    |       |
+-----------+--------------+------+-----+---------+-------+
6 rows in set (0.048 sec)
```

5. **Tampilkan data yang berada dalam tabel productnotes**

MariaDB [orderentry]> select*from productnotes;

```
MariaDB [orderentry]> select*from productnotes;
+---------+---------+------------+-----------+
| note_id | prod_id | note_date  | note_text |
+---------+---------+------------+-----------+
| 001     | ANV01   | 2010-09-17 | terbayar  |
| 002     | FB      | 2017-11-19 | terbayar  |
| 003     | SAFE    | 2021-07-22 | terbayar  |
+---------+---------+------------+-----------+
3 rows in set (0.002 sec)
```

6. **Hapus salah satu row dari tabel productnotes dan buka tabel untuk memastikan bawa data sudah memang terhapus**

MariaDB [orderentry]> delete from productnotes where note_id='002'; Query OK, 1 row affected (0.046 sec) MariaDB [orderentry]> select*from productnotes;

```
MariaDB [orderentry]> select*from productnotes;
+---------+---------+------------+-----------+
| note_id | prod_id | note_date  | note_text |
+---------+---------+------------+-----------+
| 001     | ANV01   | 2010-09-17 | terbayar  |
| 003     | SAFE    | 2021-07-22 | terbayar  |
+---------+---------+------------+-----------+
2 rows in set (0.000 sec)
```

7. **Tampilkan tabel productnotes_hapus untuk melihat data dari productnotes yang sudah dihapus**

MariaDB [orderentry]> select*from productnotes_hapus;

```
MariaDB [orderentry]> select*from productnotes_hapus;
+---------+---------+------------+-----------+------------+----------------+
| note_id | prod_id | note_date  | note_text | tgl_hapus  | name_id        |
+---------+---------+------------+-----------+------------+----------------+
| 002     | FB      | 2017-11-19 | terbayar  | 2025-11-05 | root@localhost |
+---------+---------+------------+-----------+------------+----------------+
1 row in set (0.000 sec)
```