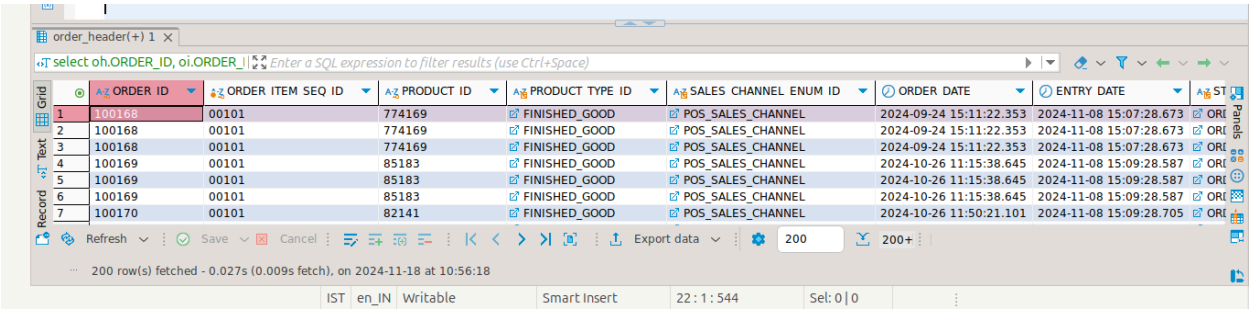
SQL ASSIGNMENT 2

1. **Fetch the following columns for completed order items for sales orders of SM_STORE product store and that are physical items.**

Updated Query:-

```
select oh.ORDER_ID,
    oi.ORDER_ITEM_SEQ_ID,
    p.PRODUCT_ID,
    p.PRODUCT_TYPE_ID,
    oh.SALES_CHANNEL_ENUM_ID,
    oh.ORDER_DATE,
    oh.ENTRY_DATE,
    oh.STATUS_ID,
    oh.ORDER_TYPE_ID,
    os.STATUS_DATETIME ,
    oh.PRODUCT_STORE_ID
FROM
order_header oh
JOIN
order_item oi
on oh.ORDER_ID = oi.ORDER_ID
JOIN
product p on p.PRODUCT_ID = oi.PRODUCT_ID
join order_status os on oh.ORDER_ID = os.ORDER_ID
where oh.PRODUCT_STORE_ID = 'SM_STORE' and oh.STATUS_ID =
'ORDER_COMPLETED' AND
oh.ORDER_TYPE_ID = 'SALES_ORDER';
```

Result :-



Query :-

```
select oh.ORDER_ID,
    oi.ORDER_ITEM_SEQ_ID,
    p.PRODUCT_ID,
    p.PRODUCT_TYPE_ID,
    oh.SALES_CHANNEL_ENUM_ID,
    oh.ORDER_DATE,
    oh.ENTRY_DATE,
    os.STATUS_ID,
    os.STATUS_DATETIME,
    oh.ORDER_TYPE_ID,
    oh.PRODUCT_STORE_ID,
case when p.PRODUCT_TYPE_ID = 'digital_good' then 'Y' ELSE
'N' end AS
IS_DIGITAL,
case when p.PRODUCT_TYPE_ID = 'finished_good' then 'Y' else 'N' end  AS
IS_PHYSICAL
FROM
order_header oh
JOIN
order_item oi
on oh.ORDER_ID = oi.ORDER_ID
JOIN
product p on p.PRODUCT_ID = oi.PRODUCT_ID
JOIN
order_status os
on os.ORDER_ID = oi.ORDER_ID
and os.ORDER_ITEM_SEQ_ID = oi.ORDER_ITEM_SEQ_ID
```

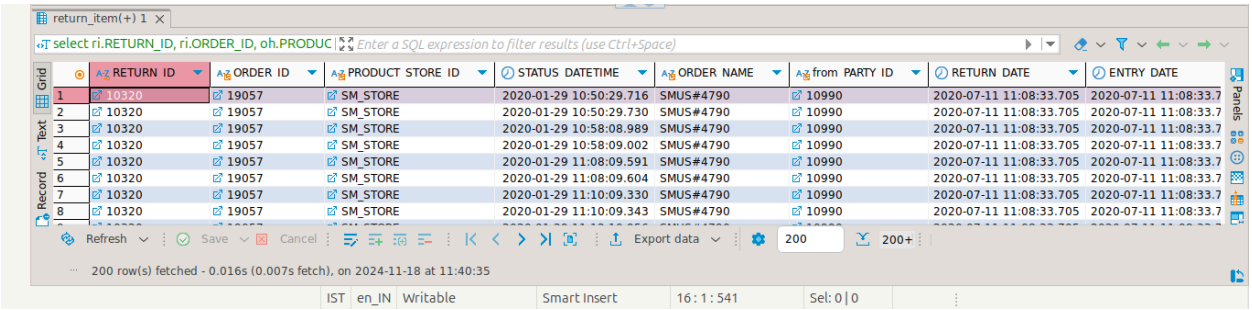
```
where oh.PRODUCT_STORE_ID = 'SM_STORE' and os.STATUS_ID =
'ORDER_COMPLETED' AND
oh.ORDER_TYPE_ID= 'SALES_ORDER';
```

2. Fetch the following columns for completed return items of SM_STORE for ecom return channel.

Updated Query: -

```
select ri.RETURN_ID,
    ri.ORDER_ID,
    oh.PRODUCT_STORE_ID,
    rs.STATUS_DATETIME,
    oh.ORDER_NAME,
    rh.from_PARTY_ID,
    rh.RETURN_DATE,
    rh.ENTRY_DATE,
    rh.RETURN_CHANNEL_ENUM_ID
from return_header rh join return_item ri
on rh.RETURN_ID = ri.RETURN_ID
join order_header oh on ri.ORDER_ID = oh.ORDER_ID
join return_status rs on rh.STATUS_ID = rs.STATUS_ID
and ri.STATUS_ID = rs.STATUS_ID
where ri.STATUS_ID = 'return_completed' and oh.PRODUCT_STORE_ID = 'sm_store'
and rh.RETURN_CHANNEL_ENUM_ID = 'ecom_rtn_channel'
```

Result:-



Query:-

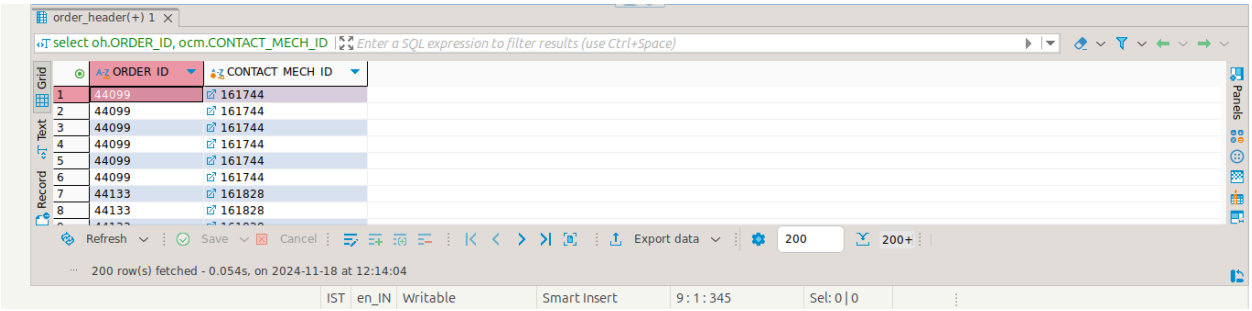
```
select ri.RETURN_ID,
    ri.ORDER_ID,
```

```
    ps.PRODUCT_STORE_ID,
    rs.STATUS_DATETIME,
    oh.ORDER_NAME,
    rh.from_PARTY_ID,
    rh.RETURN_DATE,
    rh.ENTRY_DATE,
    rh.RETURN_CHANNEL_ENUM_ID
from return_header rh join return_item ri
on rh.RETURN_ID = ri.RETURN_ID
join order_header oh on ri.ORDER_ID = oh.ORDER_ID
join product p on ri.PRODUCT_ID = p.PRODUCT_ID
join product_category pc on p.PRIMARY_PRODUCT_CATEGORY_ID =
pc.PRODUCT_CATEGORY_ID
join prod_catalog_category pcc on pc.PRODUCT_CATEGORY_ID =
pcc.PRODUCT_CATEGORY_ID
join prod_catalog pc2 on pc2.PROD_CATALOG_ID  = pcc.PROD_CATALOG_ID
join product_store_catalog psc on psc.PROD_CATALOG_ID =
pc2.PROD_CATALOG_ID
join product_store ps on ps.PRODUCT_STORE_ID = psc.PRODUCT_STORE_ID
join return_status rs on rh.STATUS_ID = rs.STATUS_ID
and ri.STATUS_ID = rs.STATUS_ID
where ri.STATUS_ID = 'return_completed' and ps.PRODUCT_STORE_ID = 'sm_store'
and rh.RETURN_CHANNEL_ENUM_ID = 'ecom_rtn_channel'
```

3. Fetch the order id and contact mech id for the shipping address of the orders completed in October of 2023.

Updated Query:-

Result:-



Query:-

```
select oh.ORDER_ID,
    ocm.CONTACT_MECH_ID
from order_header oh
join order_contact_mech ocm on oh.ORDER_ID = ocm.ORDER_ID
join order_status os on  os.ORDER_ID = oh.ORDER_ID
where  ocm.CONTACT_MECH_PURPOSE_TYPE_ID = 'SHIPPING_LOCATION'
 and  oh.STATUS_ID = 'ORDER_COMPLETED'
 and  os.STATUS_DATETIME between '2023-10-01' and '2023-10-31';
```

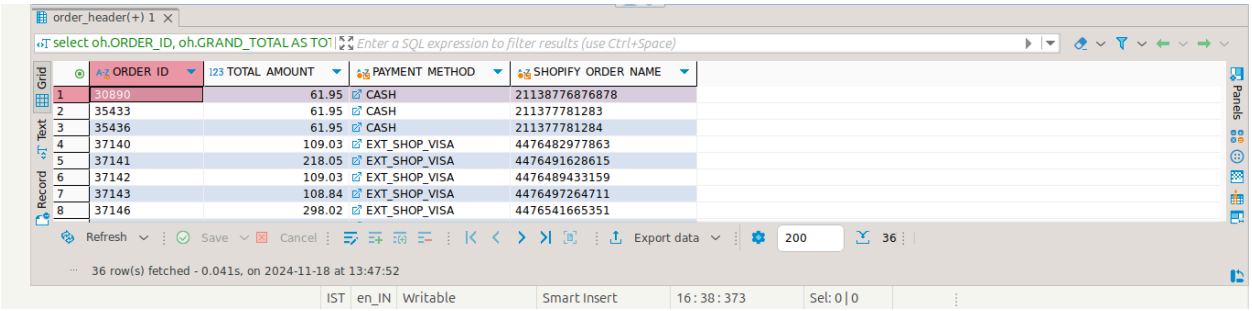
4. Fetch the following columns for created orders. These should be sales orders.

Update Query:-

```
select
  oh.ORDER_ID,
  oh.GRAND_TOTAL AS TOTAL_AMOUNT,
  opp.PAYMENT_METHOD_TYPE_ID AS PAYMENT_METHOD,
```

```
  oi.ID_VALUE AS SHOPIFY_ORDER_NAME
from
  order_header oh
join
  order_identification oi
on oh.ORDER_ID = oi.ORDER_ID
join
  order_payment_preference opp
on opp.ORDER_ID = oh.ORDER_ID
where
  oh.STATUS_ID = 'order_created'
and  oh.ORDER_TYPE_ID = 'sales_order'
 group by ORDER_ID
```

Result : -

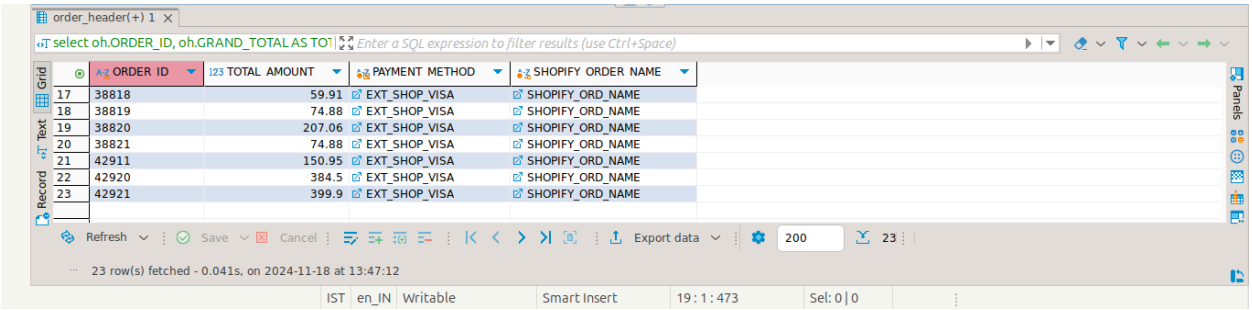


Query :-

```
select
  oh.ORDER_ID,
  oh.GRAND_TOTAL AS TOTAL_AMOUNT,
  opp.PAYMENT_METHOD_TYPE_ID AS PAYMENT_METHOD,
  oi.ORDER_IDENTIFICATION_TYPE_ID AS SHOPIFY_ORDER_NAME
from
  order_header oh
join
  order_identification oi
on oh.ORDER_ID = oi.ORDER_ID
join
  order_payment_preference opp
on opp.ORDER_ID = oh.ORDER_ID
where
  oh.STATUS_ID = 'order_created'
```

```
and  oh.ORDER_TYPE_ID = 'sales_order'
and  oi.ORDER_IDENTIFICATION_TYPE_ID = 'shopify_ord_name'
 group by ORDER_ID;
```

Result :-

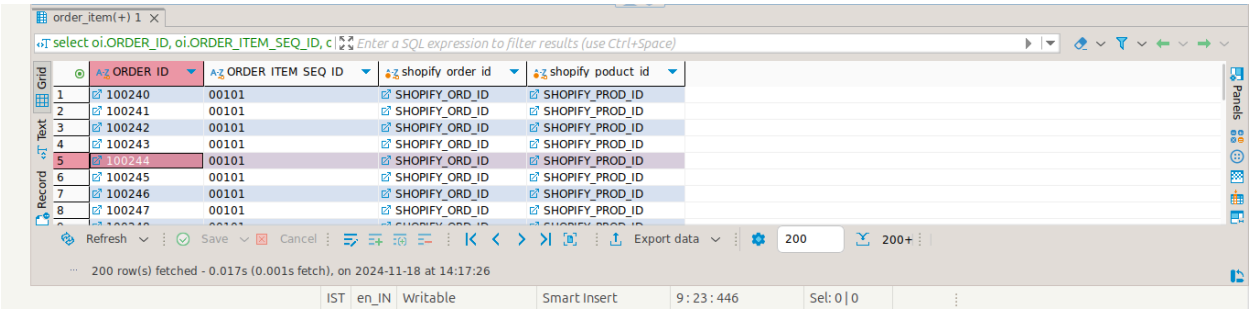


5. Fetch the following data for completed order items in July of 2023

Query :-

```
select oi.ORDER_ID,
    oi.ORDER_ITEM_SEQ_ID,
    oi2.ORDER_IDENTIFICATION_TYPE_ID as shopify_order_id,
    gi.GOOD_IDENTIFICATION_TYPE_ID as shopify_product_id
from order_item oi join order_identification oi2
on oi.ORDER_ID = oi2.ORDER_ID
join good_identification gi on gi.PRODUCT_ID = oi.PRODUCT_ID
where oi2.ORDER_IDENTIFICATION_TYPE_ID = 'shopify_ord_id' and
gi.GOOD_IDENTIFICATION_TYPE_ID = 'shopify_prod_id'
group by oi.ORDER_ID;
```

Result :-

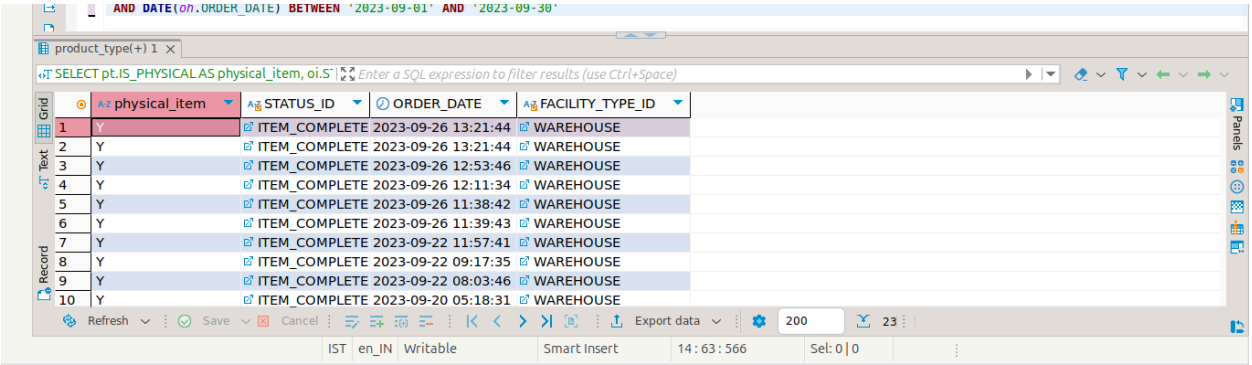


6. Fetch all the physical items completed from Warehouse in September of 2023.

Update Query:-

```
SELECT pt.IS_PHYSICAL AS physical_item,
    oi.STATUS_ID,
    oh.ORDER_DATE,
    f.FACILITY_TYPE_ID
FROM product_type pt
JOIN product p ON pt.PRODUCT_TYPE_ID = p.PRODUCT_TYPE_ID
JOIN order_item oi ON oi.PRODUCT_ID = p.PRODUCT_ID
JOIN order_header oh ON oh.ORDER_ID = oi.ORDER_ID
join order_item_ship_group oisg on oisg.ORDER_ID = oh.ORDER_ID
JOIN facility f ON f.FACILITY_ID = oisg.FACILITY_ID
WHERE pt.IS_PHYSICAL = 'Y'
AND oi.STATUS_ID = 'item_completed'
AND f.FACILITY_TYPE_ID = 'warehouse'
AND DATE(oh.ORDER_DATE) BETWEEN '2023-09-01' AND '2023-09-30'
```

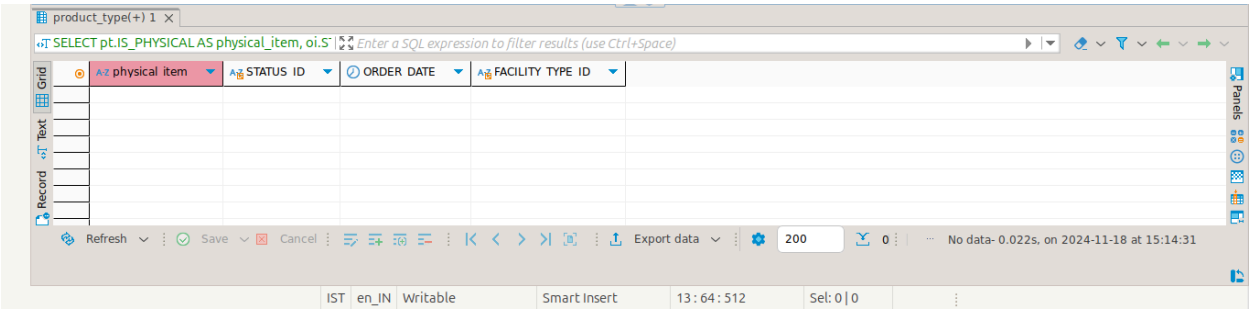
Result:-



Query: -

```
SELECT pt.IS_PHYSICAL AS physical_item,
    oi.STATUS_ID,
    oh.ORDER_DATE,
    f.FACILITY_TYPE_ID
FROM product_type pt
JOIN product p ON pt.PRODUCT_TYPE_ID = p.PRODUCT_TYPE_ID
JOIN order_item oi ON oi.PRODUCT_ID = p.PRODUCT_ID
JOIN order_header oh ON oh.ORDER_ID = oi.ORDER_ID
JOIN facility f ON f.FACILITY_ID = oh.ORIGIN_FACILITY_ID
WHERE pt.IS_PHYSICAL = 'Y'
 AND oi.STATUS_ID = 'item_completed'
 AND f.FACILITY_TYPE_ID = 'warehouse'
 AND DATE(oh.ORDER_DATE) BETWEEN '2023-09-01' AND '2023-09-30'
```

Result:-



Note:- There is no record in September 2023 based on condition

7. Fetch all the physical items ordered in the month of September 2023.

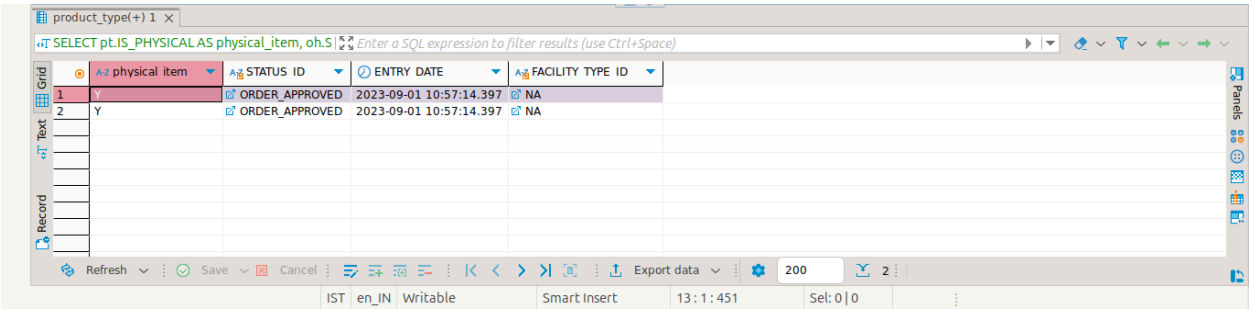
Update Query:-

```
SELECT pt.IS_PHYSICAL AS physical_item,
    oh.STATUS_ID,
    oh.ENTRY_DATE,
    f.FACILITY_TYPE_ID
FROM product_type pt
JOIN product p ON pt.PRODUCT_TYPE_ID = p.PRODUCT_TYPE_ID
JOIN order_item oi ON oi.PRODUCT_ID = p.PRODUCT_ID
JOIN order_header oh ON oh.ORDER_ID = oi.ORDER_ID
join order_item_ship_group oisg on oisg.ORDER_ID = oh.ORDER_ID
JOIN facility f ON f.FACILITY_ID = oisg.FACILITY_ID
WHERE pt.IS_PHYSICAL = 'Y'
AND oh.STATUS_ID = 'order_approved'
AND DATE(oh.ENTRY_DATE) = '2023-09-01'
```

Query:-

```
SELECT pt.IS_PHYSICAL AS physical_item,
     oh.STATUS_ID,
     oh.ENTRY_DATE,
     f.FACILITY_TYPE_ID
FROM product_type pt
JOIN product p ON pt.PRODUCT_TYPE_ID = p.PRODUCT_TYPE_ID
JOIN order_item oi ON oi.PRODUCT_ID = p.PRODUCT_ID
JOIN order_header oh ON oh.ORDER_ID = oi.ORDER_ID
JOIN facility f ON f.FACILITY_ID = oh.ORIGIN_FACILITY_ID
WHERE pt.IS_PHYSICAL = 'Y'
 AND oh.STATUS_ID = 'order_approved'
 AND DATE(oh.ENTRY_DATE) = '2023-09-01'
```

Result :-

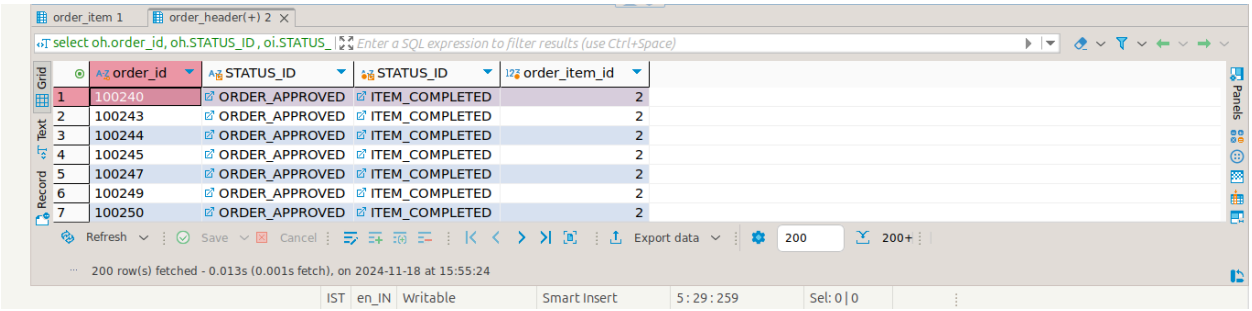


8. Find all the orders whose two or more items are completed but the orders are still in the approved status.

Query :-

```
select oh.order_id,
    count(oi.order_item_seq_id) as order_item_id
    from order_header oh join order_item oi on oh.ORDER_ID  = oi.ORDER_ID
    where oi.STATUS_ID  = 'item_completed' and oh.STATUS_ID = 'order_approved'
    group by oh.ORDER_ID
    having order_item_id  >= 2 ;
```

Result :-



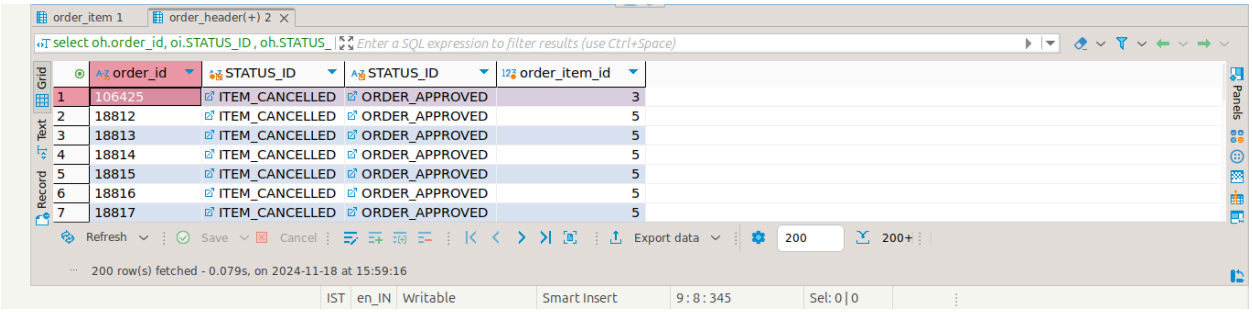
9. Find all the orders whose two or more items are canceled but the orders are still in the approved status.

Query :-

```
select oh.order_id,
    oi.STATUS_ID ,
```

```
    oh.STATUS_ID ,
    count(oi.order_item_seq_id) as order_item_id
    from order_header oh join order_item oi on oh.ORDER_ID  = oi.ORDER_ID
    where oi.STATUS_ID  = 'item_cancelled' and oh.STATUS_ID = 'order_approved'
    group by oh.ORDER_ID
    having order_item_id  >= 2
```

Result :-



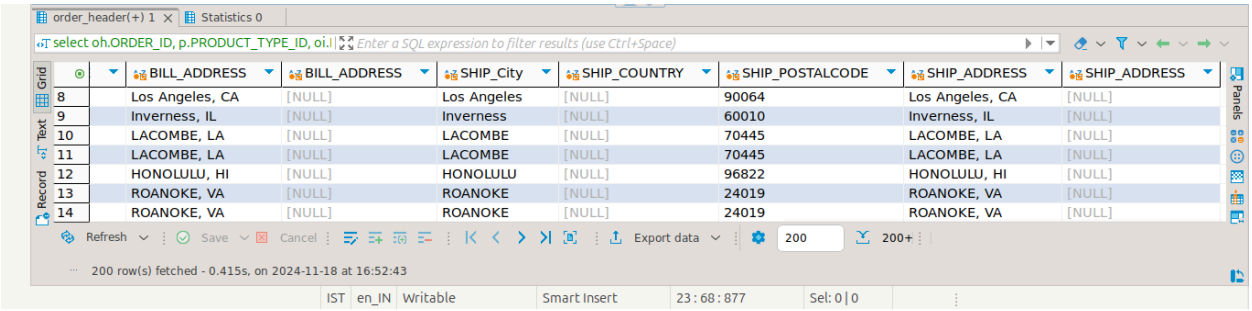
10. Fetch all the order items that are in the created status and the order type should be a sales order

Query :-

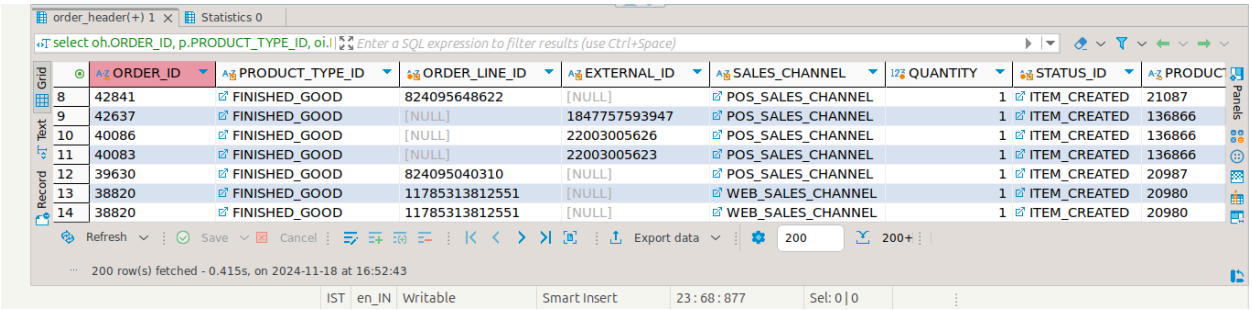
```
select oh.ORDER_ID,
    p.PRODUCT_TYPE_ID,
    oi.EXTERNAL_ID as ORDER_LINE_ID,
    oh.EXTERNAL_ID,
    oh.SALES_CHANNEL_ENUM_ID as SALES_CHANNEL,
    oi.QUANTITY,
    oi.STATUS_ID,
    p.PRODUCT_ID,
    ocm.CONTACT_MECH_PURPOSE_TYPE_ID,
    pa.city as Bill_City,
    tn.COUNTRY_CODE as BILL_COUNTRY,
    pa.POSTAL_CODE as BILL_POSTALCODE,
    pa.ADDRESS1 as BILL_ADDRESS,
```

```
    pa.ADDRESS2 as BILL_ADDRESS,
    pa.city as SHIP_City,
    tn.COUNTRY_CODE as SHIP_COUNTRY,
    pa.POSTAL_CODE as SHIP_POSTALCODE,
    pa.ADDRESS1 as SHIP_ADDRESS,
    pa.ADDRESS2 as SHIP_ADDRESS
from order_header oh join order_item oi on oh.ORDER_ID = oi.ORDER_ID
join product p on p.PRODUCT_ID = oi.PRODUCT_ID
join order_contact_mech ocm on ocm.CONTACT_MECH_ID = oh.ORDER_ID
join postal_address pa on ocm.CONTACT_MECH_ID = pa.CONTACT_MECH_ID
join telecom_number tn  on ocm.CONTACT_MECH_ID = pa.CONTACT_MECH_ID
where oi.STATUS_ID = 'item_created' and oh.ORDER_TYPE_ID = 'sales_order';
```

Result :-



	BILL_ADDRESS	BILL_ADDRESS	SHIP_City	SHIP_COUNTRY	SHIP_POSTALCODE	SHIP_ADDRESS	SHIP_ADDRESS
8	Los Angeles, CA	[NULL]	Los Angeles	[NULL]	90064	Los Angeles, CA	[NULL]
9	Inverness, IL	[NULL]	Inverness	[NULL]	60010	Inverness, IL	[NULL]
10	LACOMBE, LA	[NULL]	LACOMBE	[NULL]	70445	LACOMBE, LA	[NULL]
11	LACOMBE, LA	[NULL]	LACOMBE	[NULL]	70445	LACOMBE, LA	[NULL]
12	HONOLULU, HI	[NULL]	HONOLULU	[NULL]	96822	HONOLULU, HI	[NULL]
13	ROANOKE, VA	[NULL]	ROANOKE	[NULL]	24019	ROANOKE, VA	[NULL]
14	ROANOKE, VA	[NULL]	ROANOKE	[NULL]	24019	ROANOKE, VA	[NULL]



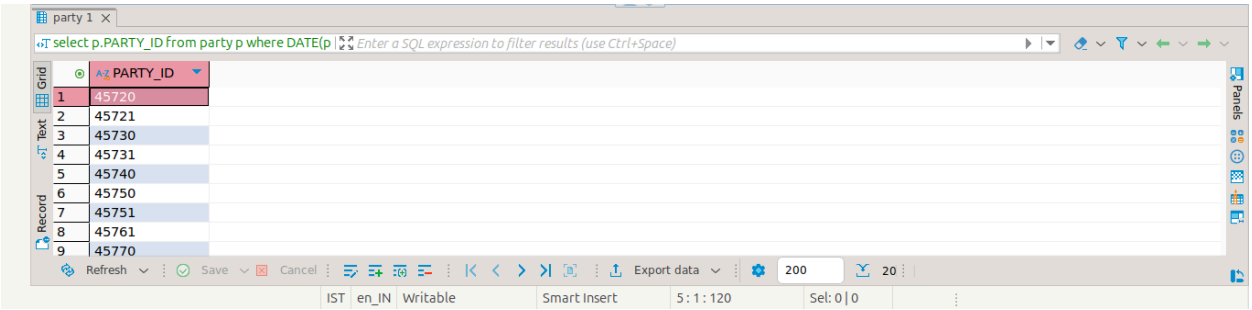
	ORDER_ID	PRODUCT_TYPE_ID	ORDER_LINE_ID	EXTERNAL_ID	SALES_CHANNEL	QUANTITY	STATUS_ID	PRODUC
8	42841	FINISHED_GOOD	824095648622	[NULL]	POS_SALES_CHANNEL	1	ITEM_CREATED	21087
9	42637	FINISHED_GOOD	[NULL]	1847757593947	POS_SALES_CHANNEL	1	ITEM_CREATED	136866
10	40086	FINISHED_GOOD	[NULL]	22003005626	POS_SALES_CHANNEL	1	ITEM_CREATED	136866
11	40083	FINISHED_GOOD	[NULL]	22003005623	POS_SALES_CHANNEL	1	ITEM_CREATED	136866
12	39630	FINISHED_GOOD	824095040310	[NULL]	POS_SALES_CHANNEL	1	ITEM_CREATED	20987
13	38820	FINISHED_GOOD	11785313812551	[NULL]	WEB_SALES_CHANNEL	1	ITEM_CREATED	20980
14	38820	FINISHED_GOOD	11785313812551	[NULL]	WEB_SALES_CHANNEL	1	ITEM_CREATED	20980

11. Fetch all the customers created in June 2023.

Query:-

```
select p.PARTY_ID
from party p  where DATE(p.CREATED_DATE) BETWEEN '2023-06-01' AND
'2023-06-30'
```

Result :-

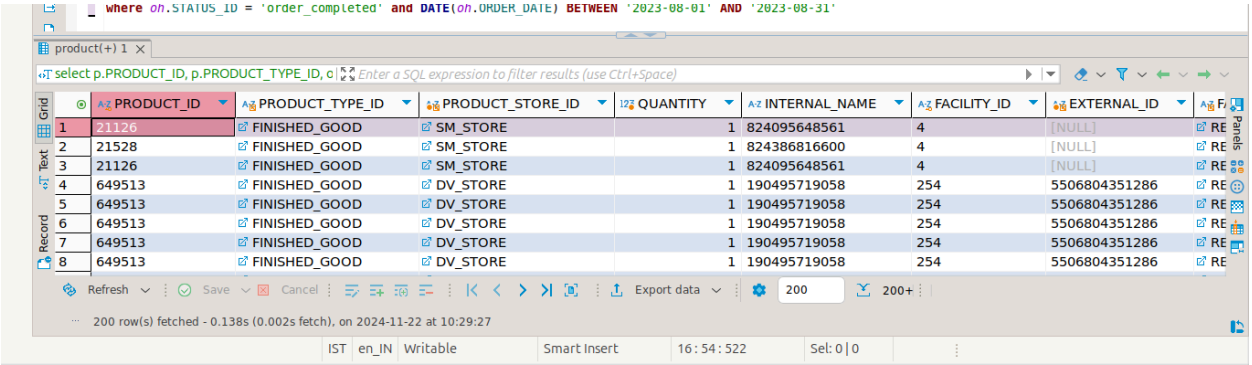


12. Fetch the following details for orders completed in August of 2023.

Update query:-

```
select p.PRODUCT_ID,
    p.PRODUCT_TYPE_ID,
    oh.PRODUCT_STORE_ID,
    oi.QUANTITY,
    p.INTERNAL_NAME,
    f.FACILITY_ID,
    oh.EXTERNAL_ID,
    f.FACILITY_TYPE_ID,
    oh2.ORDER_HISTORY_ID,
    oh2.ORDER_ID,
    oh2.ORDER_ITEM_SEQ_ID,
    oh2.SHIP_GROUP_SEQ_ID
from product p join order_item oi on p.PRODUCT_ID = oi.PRODUCT_ID
join order_header oh on oh.ORDER_ID = oi.ORDER_ID
join order_item_ship_group oisg on oisg.ORDER_ID = oh.ORDER_ID
join facility f on f.FACILITY_ID  = oisg.FACILITY_ID
join order_history oh2 on oh2.ORDER_ID = oh.ORDER_ID
where oh.STATUS_ID = 'order_completed' and DATE(oh.ORDER_DATE) BETWEEN
'2023-08-01' AND '2023-08-31'
```

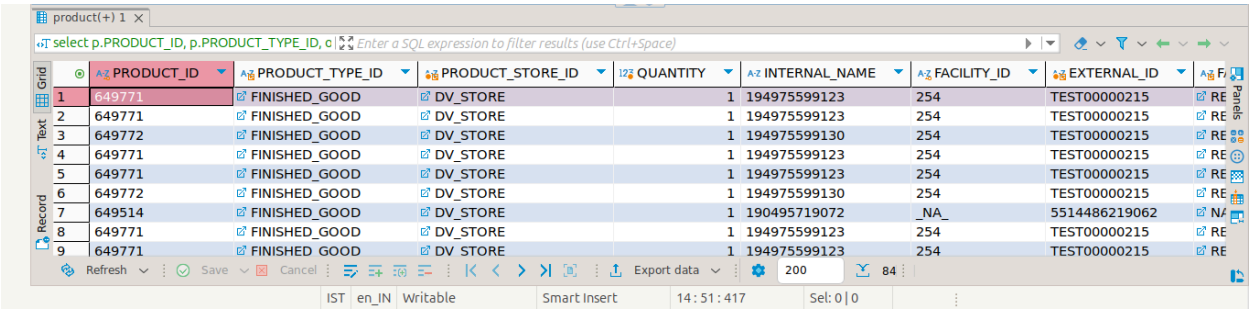
Result:-



Query:-

```
select p.PRODUCT_ID,
    p.PRODUCT_TYPE_ID,
    oh.PRODUCT_STORE_ID,
    oi.QUANTITY,
    p.INTERNAL_NAME,
    f.FACILITY_ID,
    oh.EXTERNAL_ID,
    f.FACILITY_TYPE_ID,
    oh2.ORDER_HISTORY_ID,
    oh2.ORDER_ID,
    oh2.ORDER_ITEM_SEQ_ID,
    oh2.SHIP_GROUP_SEQ_ID
from product p join order_item oi on p.PRODUCT_ID = oi.PRODUCT_ID
join order_header oh on oh.ORDER_ID = oi.ORDER_ID
join facility f on f.FACILITY_ID  = oh.ORIGIN_FACILITY_ID
join order_history oh2 on oh2.ORDER_ID = oh.ORDER_ID
where oh.STATUS_ID = 'order_completed' and DATE(oh.ORDER_DATE) BETWEEN
'2023-08-01' AND '2023-08-31'
```

Result :-

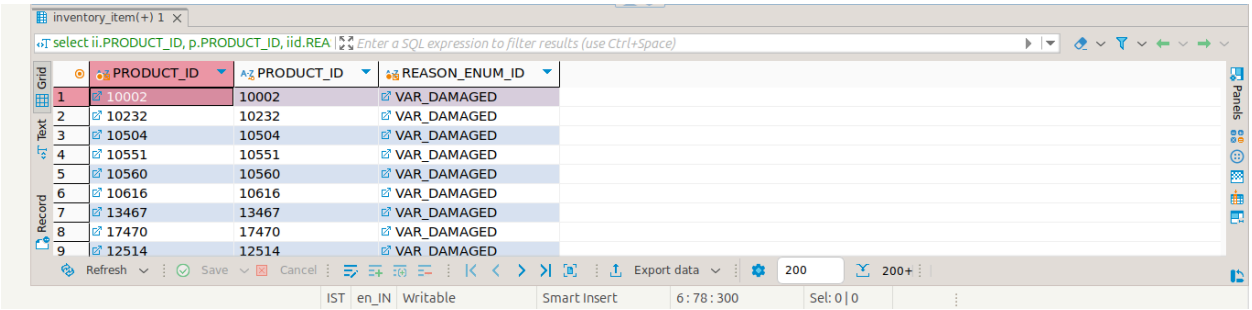


13. Fetch the inventory variances of the products where the reason is ‘VAR_LOST’ or VAR_DAMAGED.

Query:-

```
select ii.PRODUCT_ID,
    p.PRODUCT_ID,
    iid.REASON_ENUM_ID
from inventory_item ii join product p on ii.PRODUCT_ID = p.PRODUCT_ID
join inventory_item_detail iid on iid.INVENTORY_ITEM_ID = ii.INVENTORY_ITEM_ID
where iid.REASON_ENUM_ID = 'VAR_LOST' or iid.REASON_ENUM_ID =
'VAR_DAMAGED';
```

Result :-

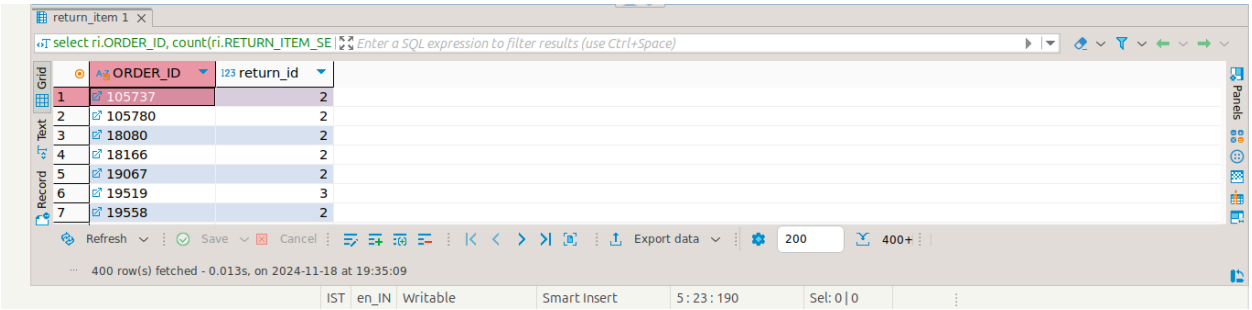


14. Find all the orders that have more than one return.

Query:-

```
select ri.ORDER_ID,
    count(ri.RETURN_ITEM_SEQ_ID) as return_id
  from return_item ri join order_header oh on oh.ORDER_ID = ri.ORDER_ID
 group by ri.ORDER_ID
having return_id >1
```

Result:-



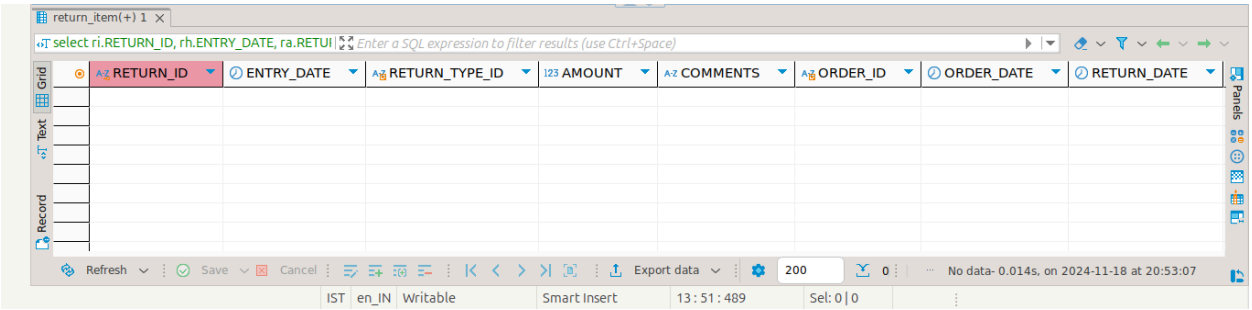
15. Get all the appeasements in July month.

- **How do we differentiate between returns and appeasements?**
    1. **Returns:**

        Typically involves goods being returned by the customer. Returns focus on reversing the transaction for a specific product or order.
    2. **Appeasement :**

        Appeasements are compensations or discounts given to customers to make up for a problem or inconvenience they faced, without requiring them to return the product.
        1. **For example:**
            - If a customer receives a damaged item and decides to keep it, the company might offer a partial refund or discount as an appeasement.
            - If there's a delay in delivery, the company might offer a voucher or credit to apologize.
- **Get all the below fields.**

Result:-



Query:-

```
select ri.RETURN_ID,
    rh.ENTRY_DATE,
    ra.RETURN_TYPE_ID ,
    ra.AMOUNT,
    ra.COMMENTS,
    ri.ORDER_ID,
    oh.ORDER_DATE,
    rh.RETURN_DATE,
    oh.PRODUCT_STORE_ID
from return_header rh join return_item ri on rh.RETURN_ID = ri.RETURN_ID
join return_adjustment ra on ra.RETURN_ITEM_SEQ_ID = ri.RETURN_ITEM_SEQ_ID
join return_adjustment_type rat on rat.RETURN_ADJUSTMENT_TYPE_ID =
ra.RETURN_ADJUSTMENT_TYPE_ID
join order_header oh on oh.ORDER_ID = ri.ORDER_ID
where DATE (rh.RETURN_DATE) between '2024-07-01' AND '2024-07-31'
and rat.RETURN_ADJUSTMENT_TYPE_ID = 'appeasement'
```