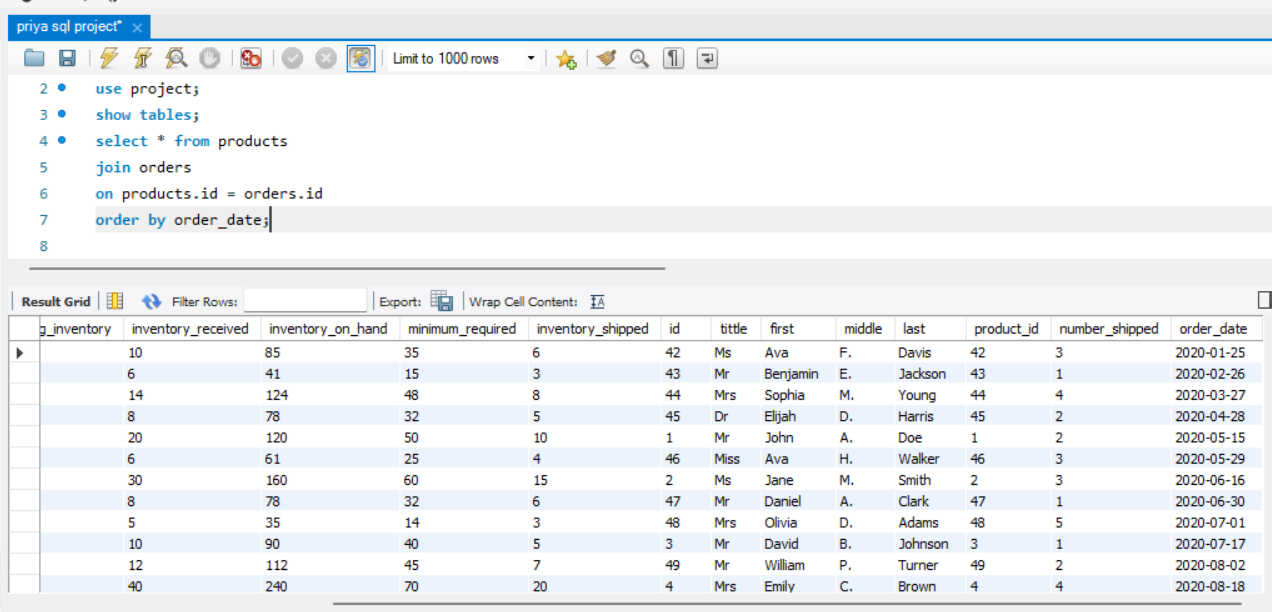
***MYSQL PROJECT***

Q1. Write a query on products and their corresponding orders, and arrange them in chronological order based on the order date?

ANS. select \* from products,orders where products.id = orders.id order by order\_date;



Q2. Write down the query for the first, middle, and last names of customers, along with the order ID, product name, and the number of items shipped for each order in descending order

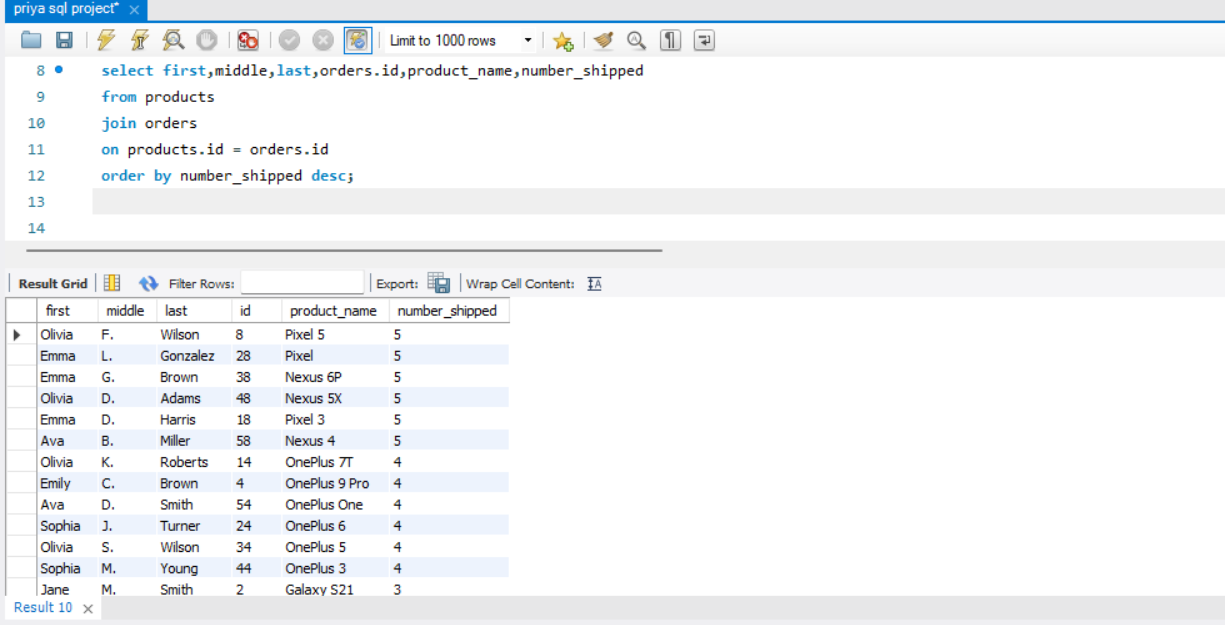
select first,middle,last,orders.id,product\_name,number\_shipped

from products

join orders

on products.id = orders.id

order by number\_shipped desc;



Q3. Write the query for product labels, part numbers, and minimum required quantities for orders where the minimum required quantity is less than 50?"

Ans

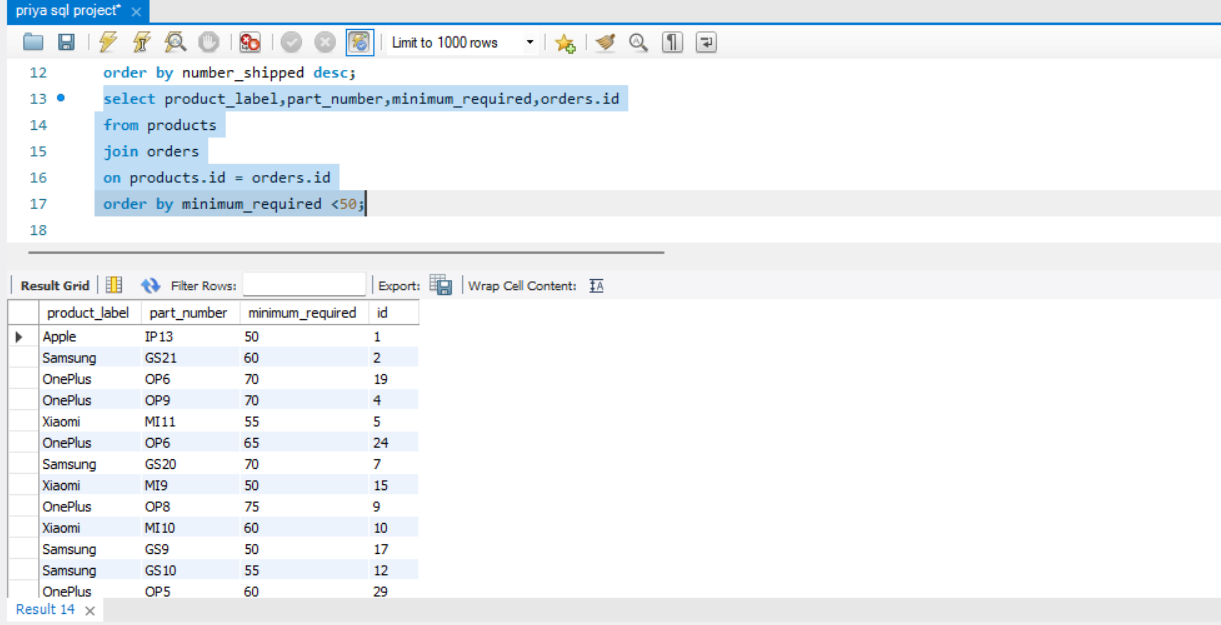
select product\_label,part\_number,minimum\_required,orders.id

from products

join orders

on products.id = orders.id

order by minimum\_required <50;



Q4. Write the query for products and orders, between 2020 and 2022 be arranged in an order of when the orders were place and the quantity of orders shipped.

Ans. select product\_name,first,last ,number\_shipped ,order\_date

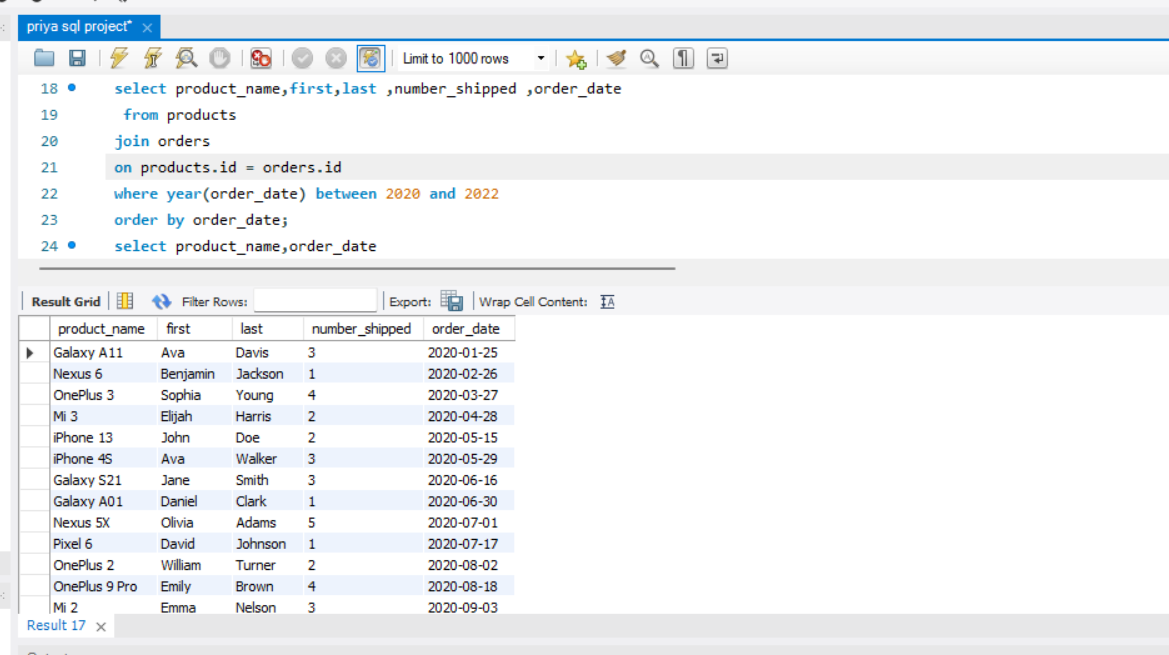
from products

join orders

on products.id = orders.id

where year(order\_date) between 2020 and 2022

order by order\_date;



Q5.write the query for how many orders were placed each year, and list these numbers from the most recent year to the oldest year?"

Ans.

SELECT YEAR(order\_date) AS order\_year, COUNT(\*) AS order\_count

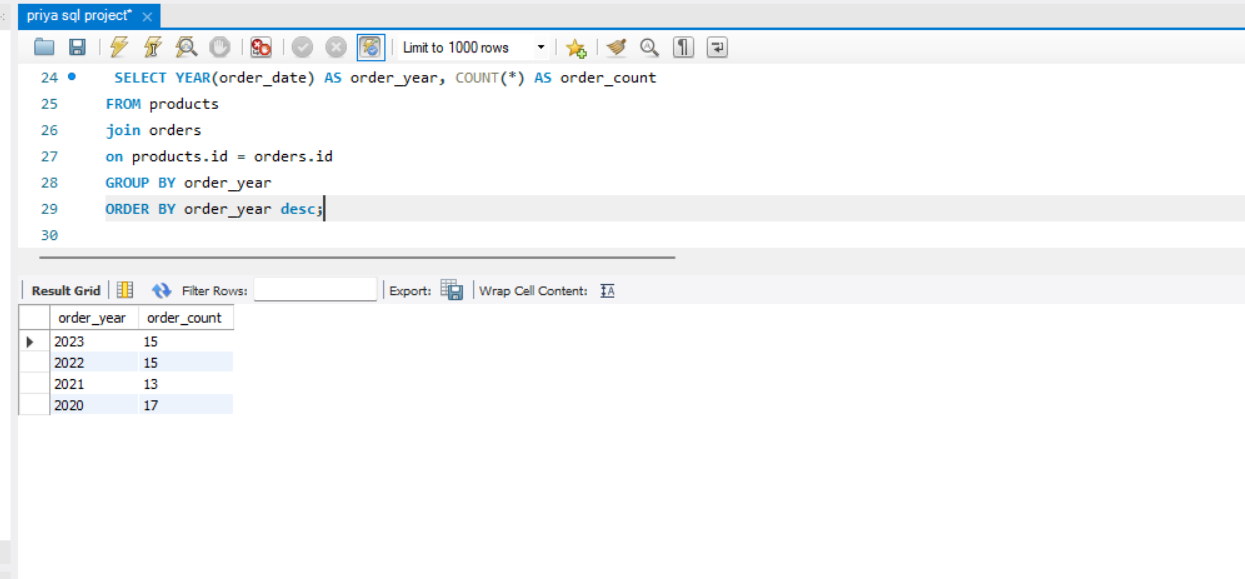
FROM products

join orders

on products.id = orders.id

GROUP BY order\_year

ORDER BY order\_year desc;



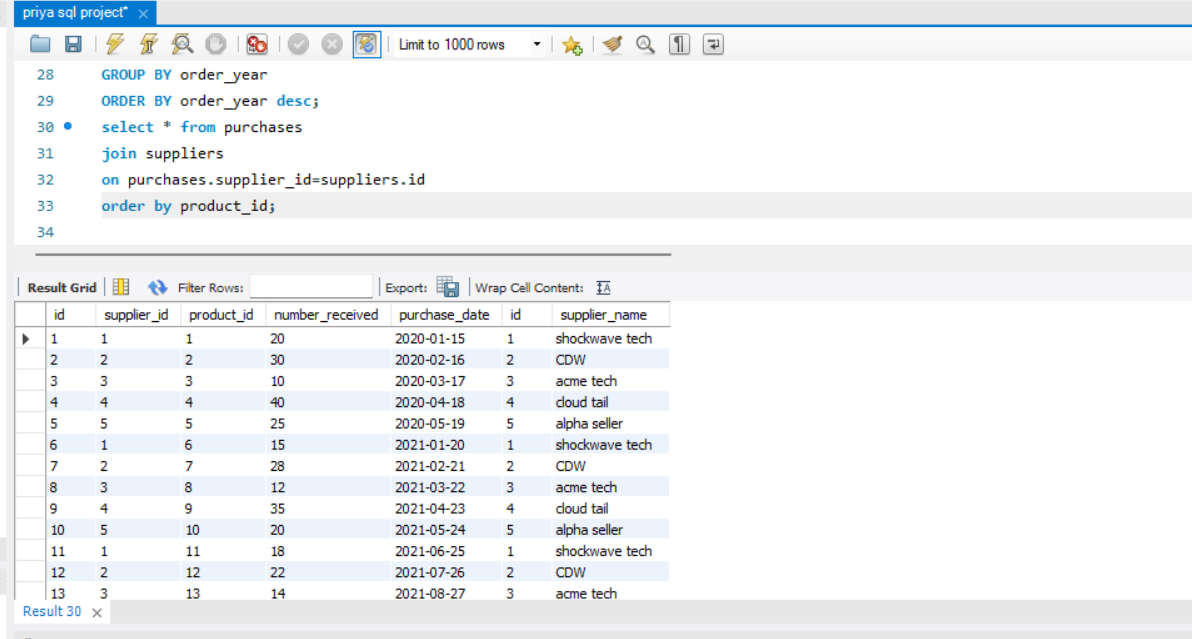
6. write the query for all the information from purchases and their corresponding suppliers arrange this data by product ID in ascending order

Ans -select \* from purchases

join suppliers

on purchases.supplier\_id=suppliers.id

order by product\_id;



Q7. Write the query for the quantity received, supplier names, and product IDs for purchases, and sort them by product ID?"

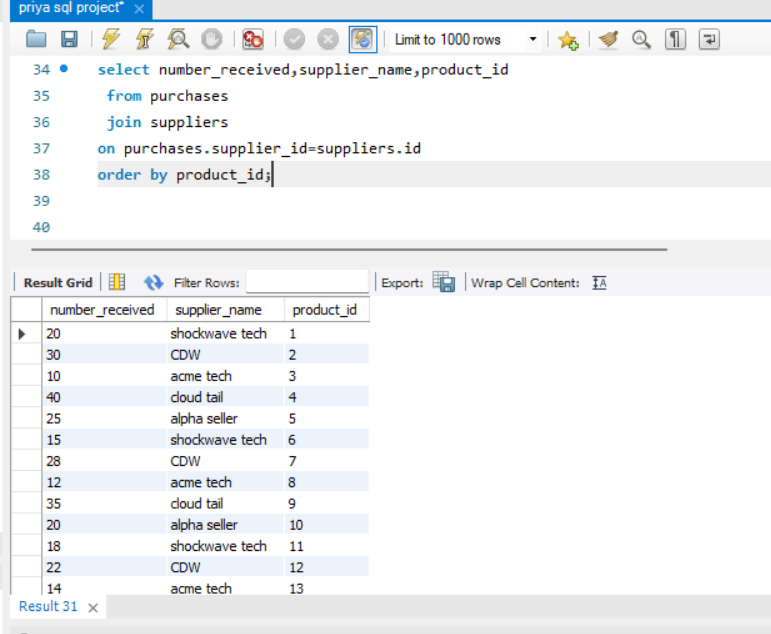
Ans. select number\_received,supplier\_name,product\_id

from purchases

join suppliers

on purchases.supplier\_id=suppliers.id

order by product\_id;



Q8. Write down the query for supplier names and the total quantities received for purchases from each supplier and arrange this information from the highest total quantity to the lowest

Ans. SELECT supplier\_name, SUM(number\_received) AS total\_purchase

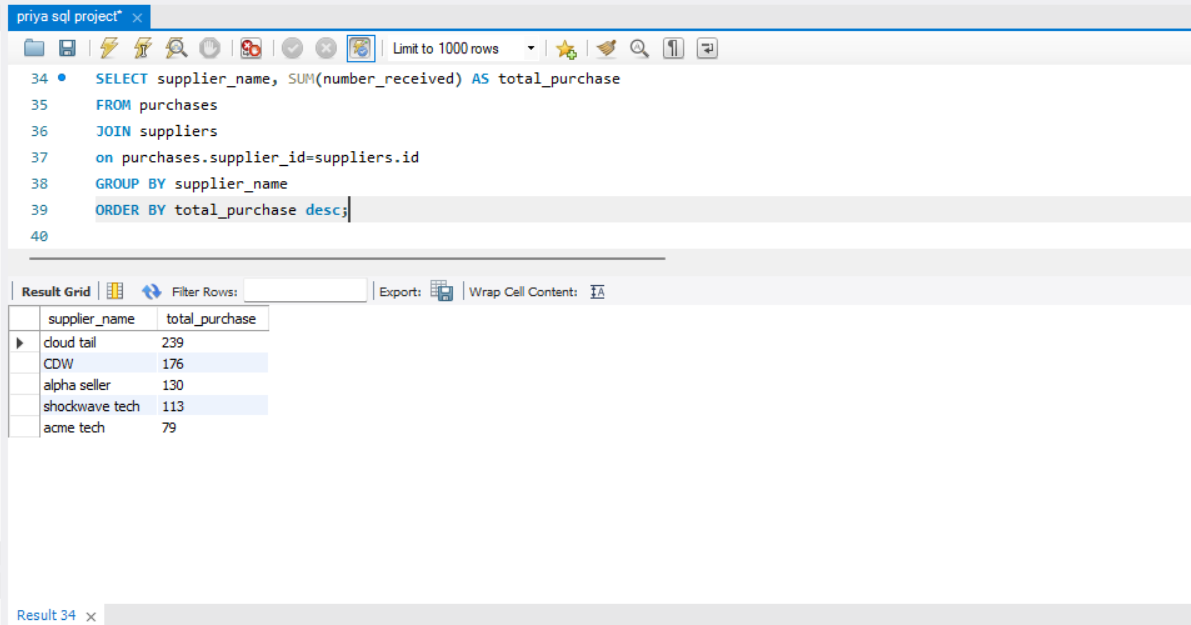
FROM purchases

JOIN suppliers

on purchases.supplier\_id=suppliers.id

GROUP BY supplier\_name

ORDER BY total\_purchase desc;



Q9. Write the query for How much was received from suppliers each year, and list these totals from the most recent year to the oldest year

Ans. SELECT YEAR(purchase\_date) AS purchase\_year, SUM(number\_received) AS total\_received

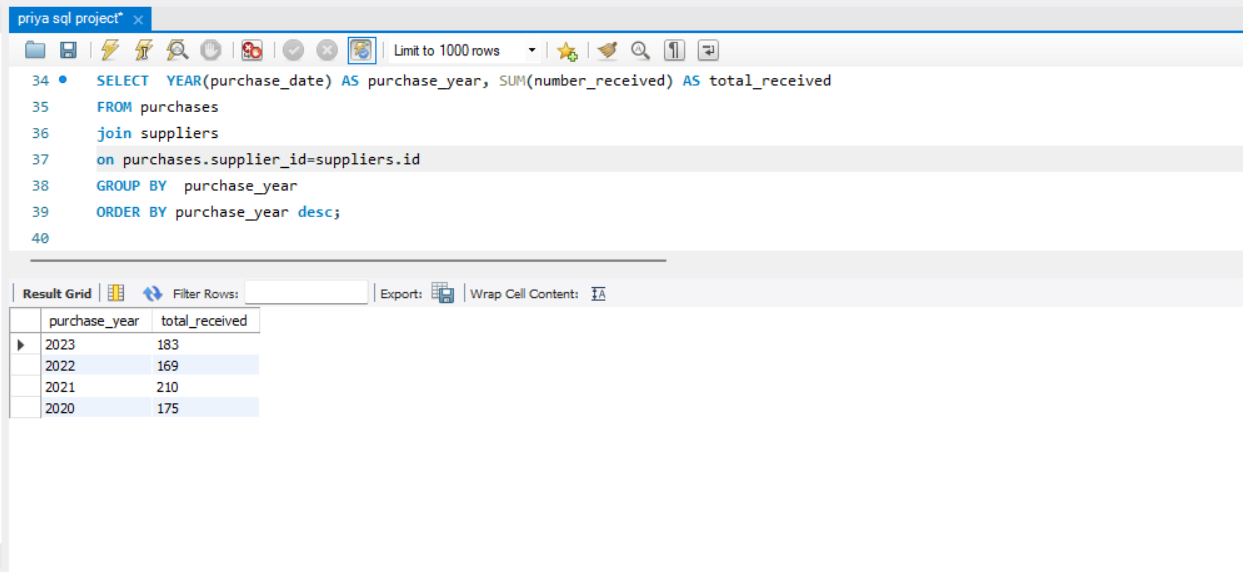
FROM purchases

join suppliers

on purchases.supplier\_id=suppliers.id

GROUP BY purchase\_year

ORDER BY purchase\_year desc;



Q10.write the query for the supplier names, purchase years, and the total quantities received while specifying a specific sorting order: by year first and within each year by supplier name.

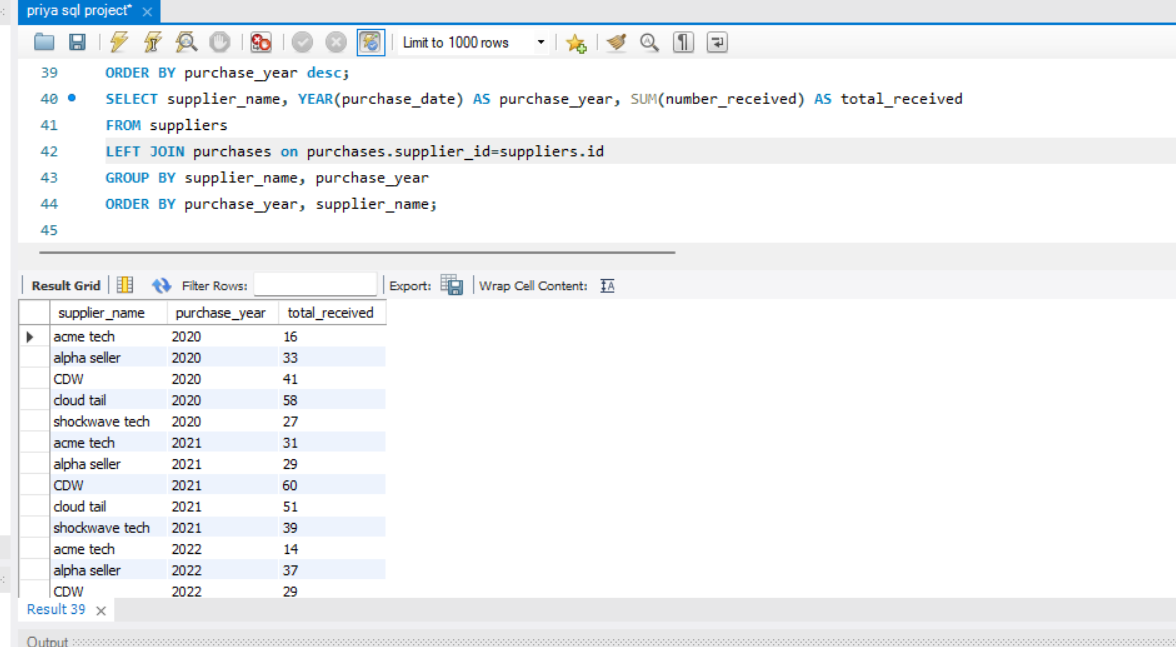
Ans -SELECT supplier\_name, YEAR(purchase\_date) AS purchase\_year, SUM(number\_received) AS total\_received

FROM suppliers

LEFT JOIN purchases on purchases.supplier\_id=suppliers.id

GROUP BY supplier\_name, purchase\_year

ORDER BY purchase\_year, supplier\_name;



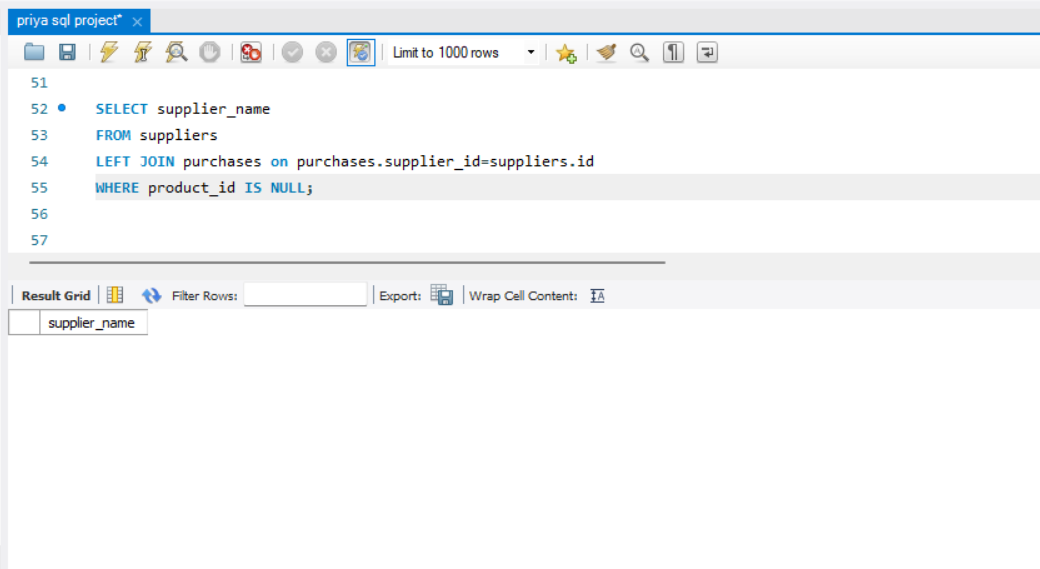
Q11. Write the query to identify the suppliers who haven't supplied any products

Ans. SELECT supplier\_name

FROM suppliers

LEFT JOIN purchases on purchases.supplier\_id=suppliers.id

WHERE product\_id IS NULL;



Q12. Write the query to identify the suppliers with the highest and lowest total quantities received and requests the values of these maximum and minimum quantities.

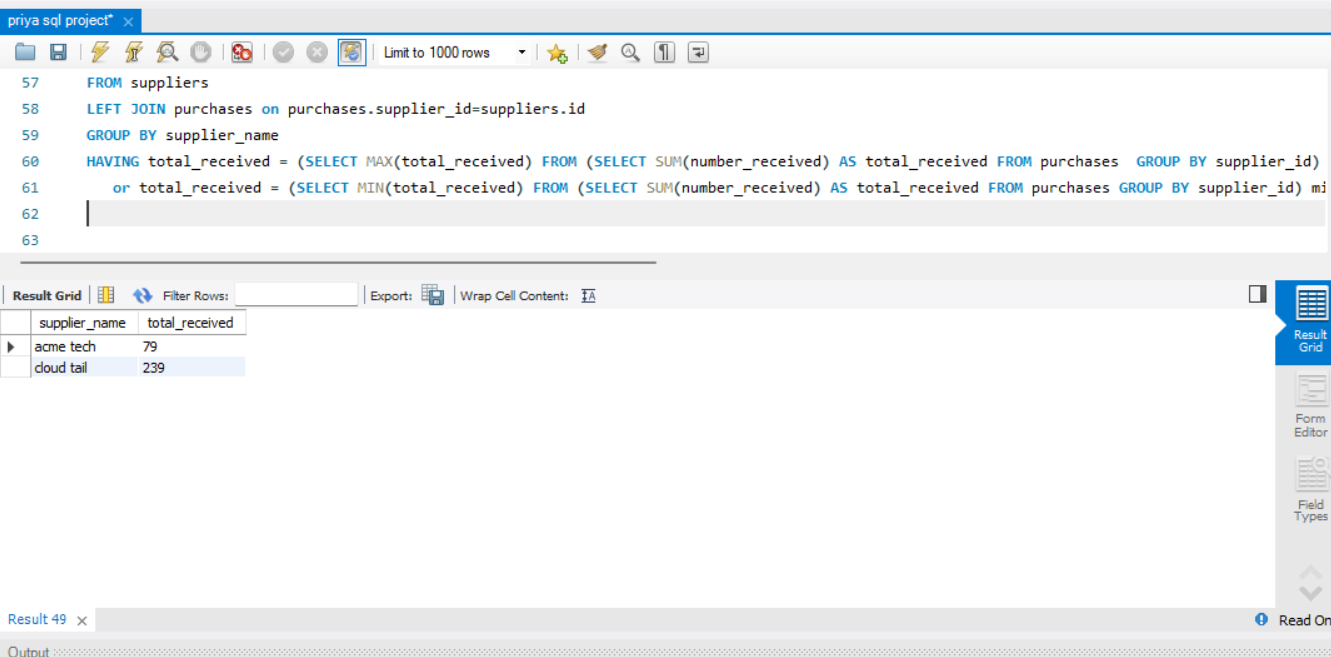
Ans SELECT supplier\_name, SUM(number\_received) AS total\_received

FROM suppliers

LEFT JOIN purchases on purchases.supplier\_id=suppliers.id

GROUP BY supplier\_name

HAVING total\_received = (SELECT MAX(total\_received) FROM (SELECT SUM(number\_received) AS total\_received FROM purchases GROUP BY supplier\_id) max\_total)

or total\_received = (SELECT MIN(total\_received) FROM (SELECT SUM(number\_received) AS total\_received FROM purchases GROUP BY supplier\_id) min\_total);

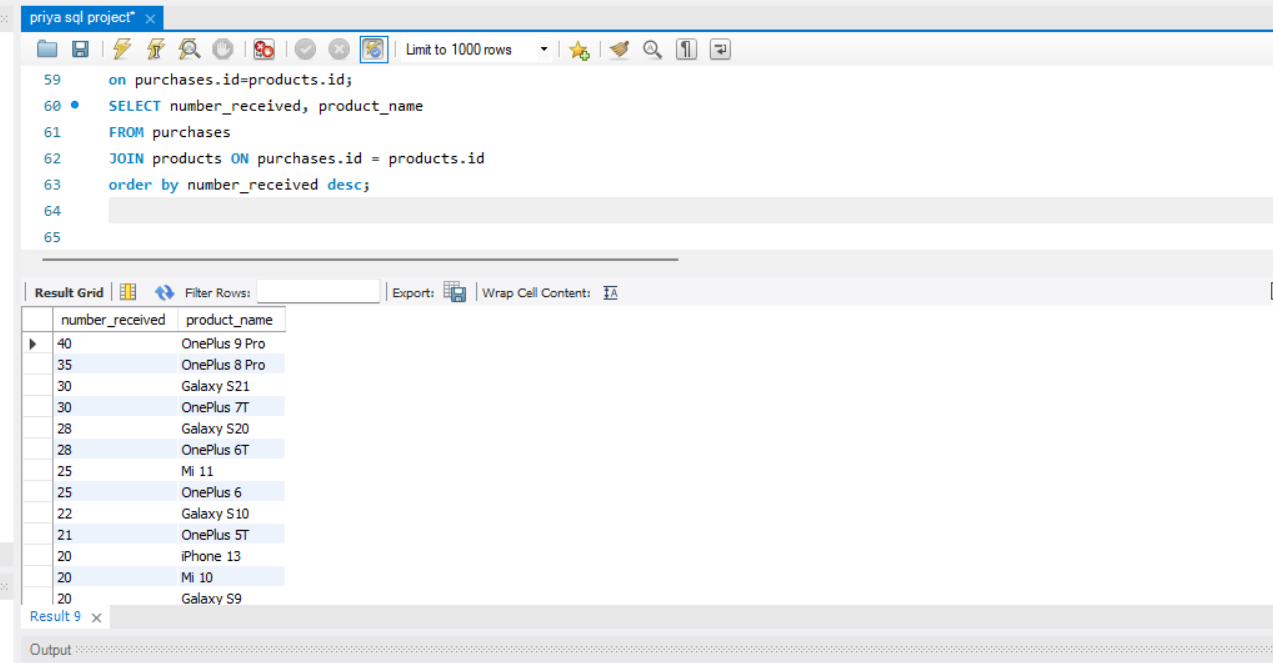
Q13. Write the query to show the quantities received for each product, and list them in descending order with their product names.

Ans. SELECT number\_received, product\_name

FROM purchases

JOIN products ON purchases.id = products.id

order by number\_received desc;



Q14. Write the query for products received the highest total quantity, and list these products along with their total received quantities.

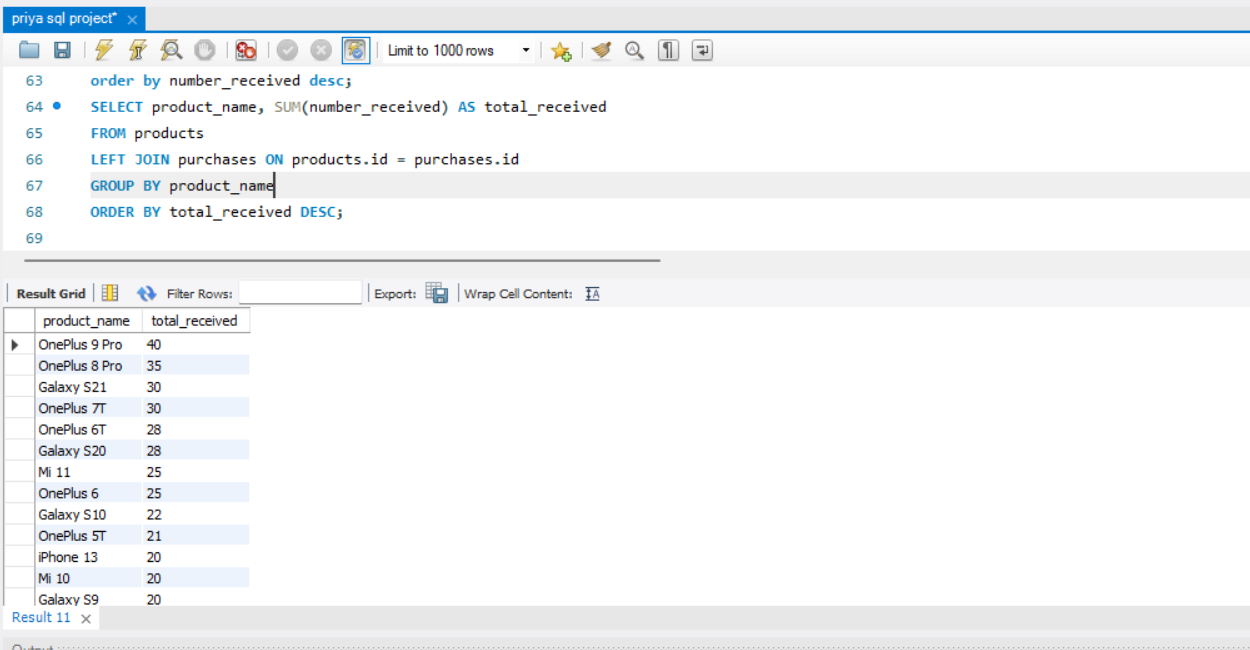
Ans. SELECT product\_name, SUM(number\_received) AS total\_received

FROM products

LEFT JOIN purchases ON products.id = purchases.id

GROUP BY product\_name

ORDER BY total\_received DESC;



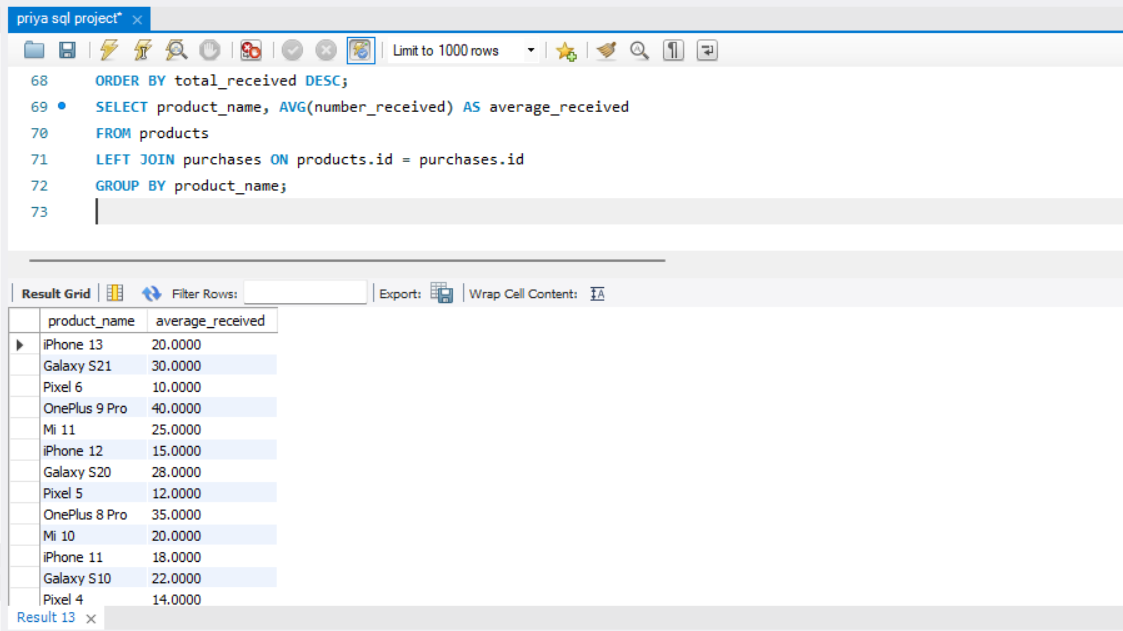
Q15. Write down the query for the average quantity received for each product.

Ans. SELECT product\_name, AVG(number\_received) AS average\_received

FROM products

LEFT JOIN purchases ON products.id = purchases.id

GROUP BY product\_name;



Q16. Write the query to calculate the maximum, minimum, average, and total starting inventory for each product in the "products" table and provides the corresponding statistics .

Ans. SELECT

MAX(starting\_inventory) AS max\_inventory,

MIN(starting\_inventory) AS min\_inventory,

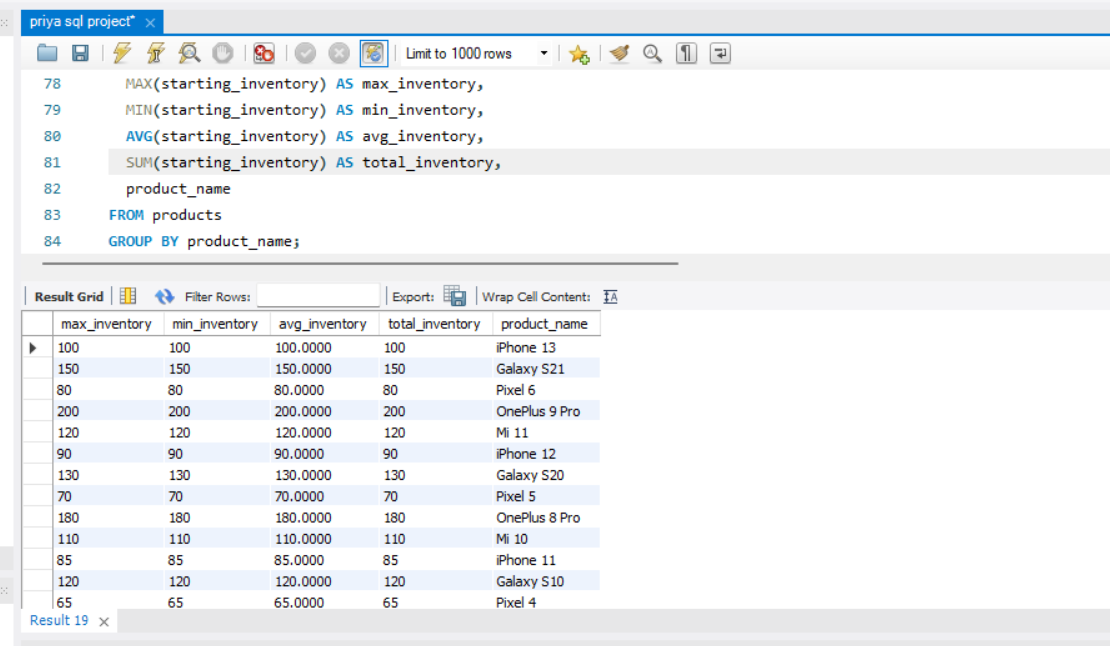
AVG(starting\_inventory) AS avg\_inventory,

SUM(starting\_inventory) AS total\_inventory,

product\_name

FROM products

GROUP BY product\_name;



Q17. Write the query to calculate the total number received for each product in the specified year (2023).

Ans. SELECT product\_id,

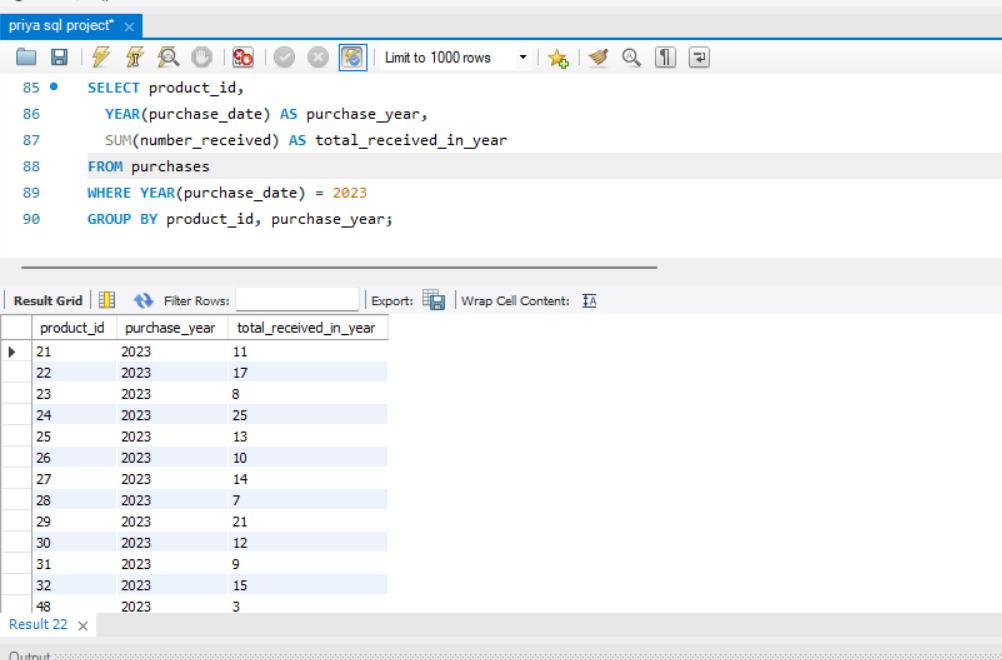
YEAR(purchase\_date) AS purchase\_year,

SUM(number\_received) AS total\_received\_in\_year

FROM purchases

WHERE YEAR(purchase\_date) = 2023

GROUP BY product\_id, purchase\_year;

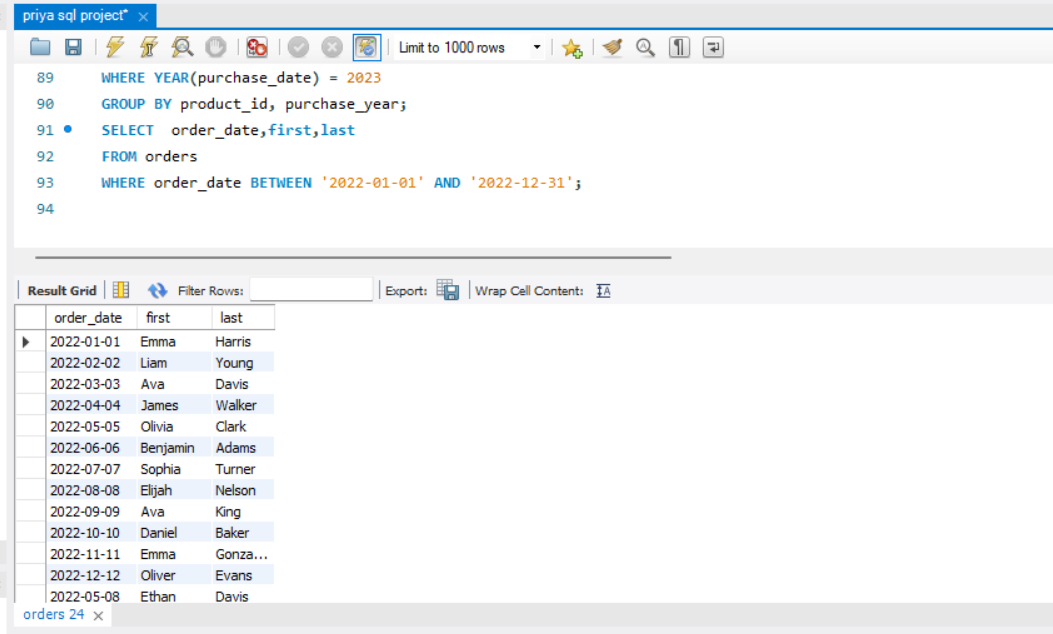


Q18. Write the query to show the orders, along with customer first and last names, that were placed between January 1, 2022, and December 31, 2022

Ans. SELECT order\_date,first,last

FROM orders

WHERE order\_date BETWEEN '2022-01-01' AND '2022-12-31';

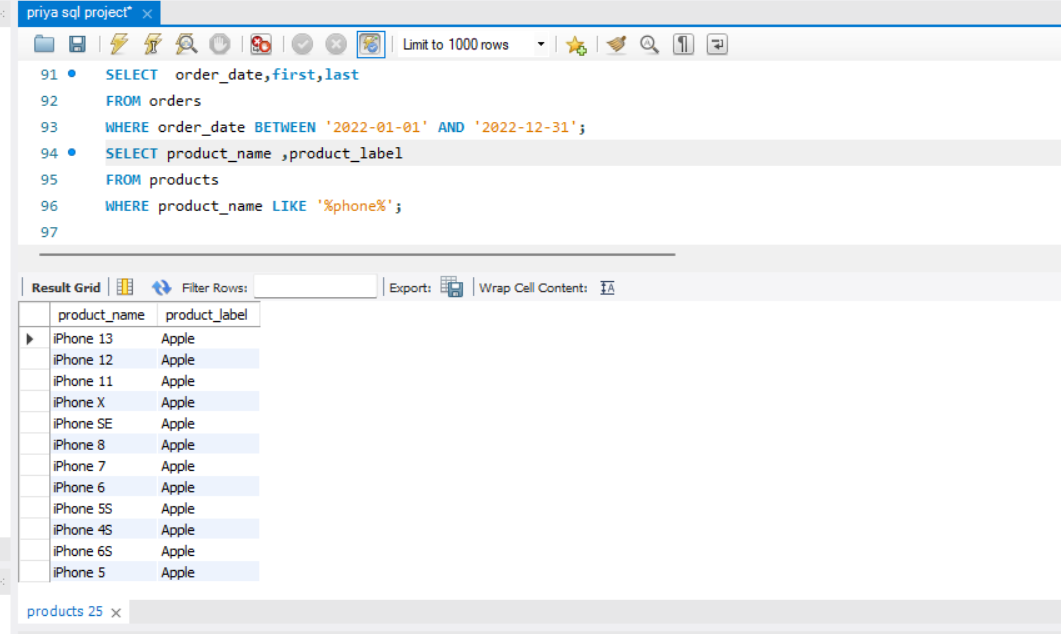


Q19. Write the query for the names and labels of products that contain the word 'phone' in their name."

SELECT product\_name ,product\_label

FROM products

WHERE product\_name LIKE '%phone%';



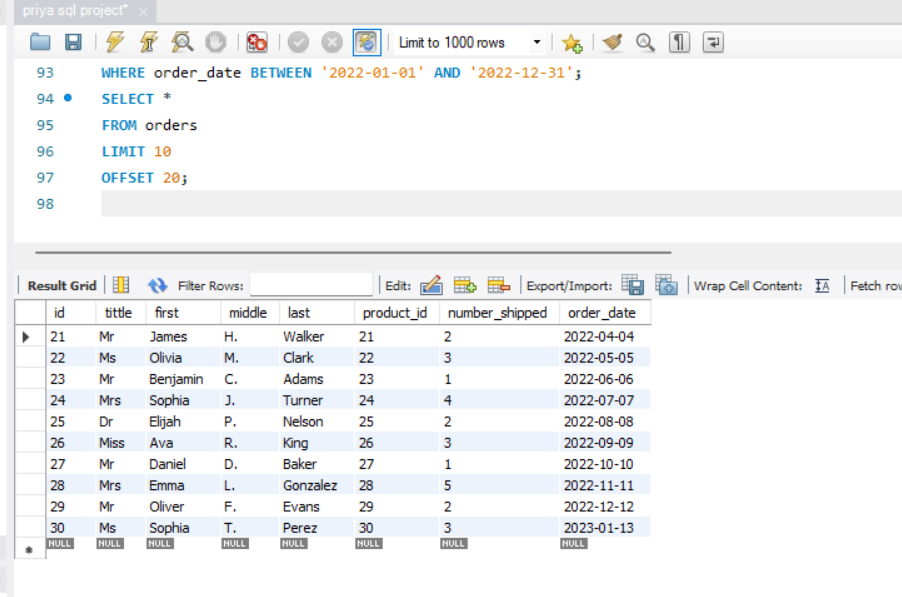
Q20. Write the query to Show 10 orders, starting from the 21st order in the list.

Ans. SELECT \*

FROM orders

LIMIT 10

OFFSET 20;



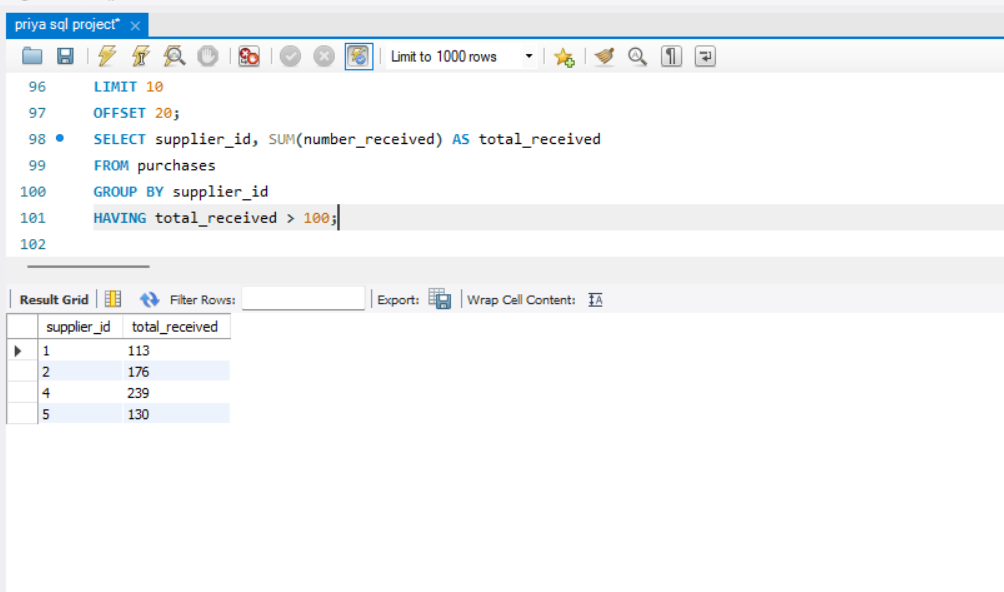
Q21. Write the query for suppliers which have received a total quantity of items greater than 100, and show the supplier IDs along with their respective total received quantities.

Ans. SELECT supplier\_id, SUM(number\_received) AS total\_received

FROM purchases

GROUP BY supplier\_id

HAVING total\_received > 100;

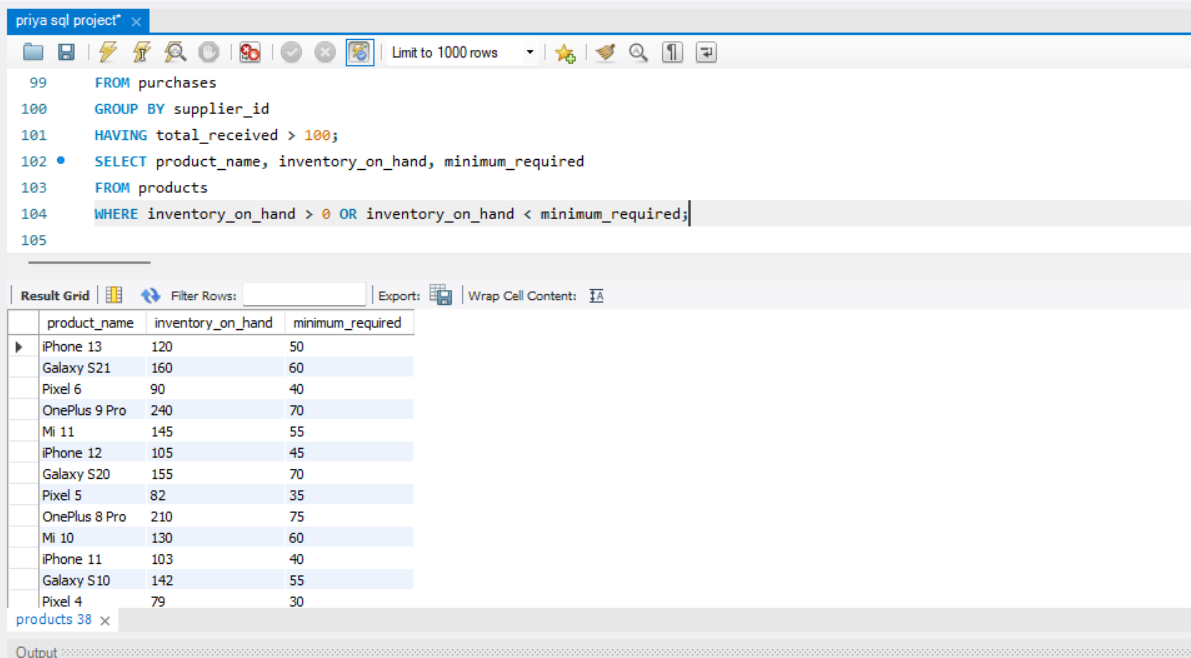


Q22. Write the query to list the product names, inventory on hand, and minimum required quantities for products where the inventory on hand is greater than 50 or less than the minimum required."

SELECT product\_name, inventory\_on\_hand, minimum\_required

FROM products

WHERE inventory\_on\_hand >50 OR inventory\_on\_hand < minimum\_required;

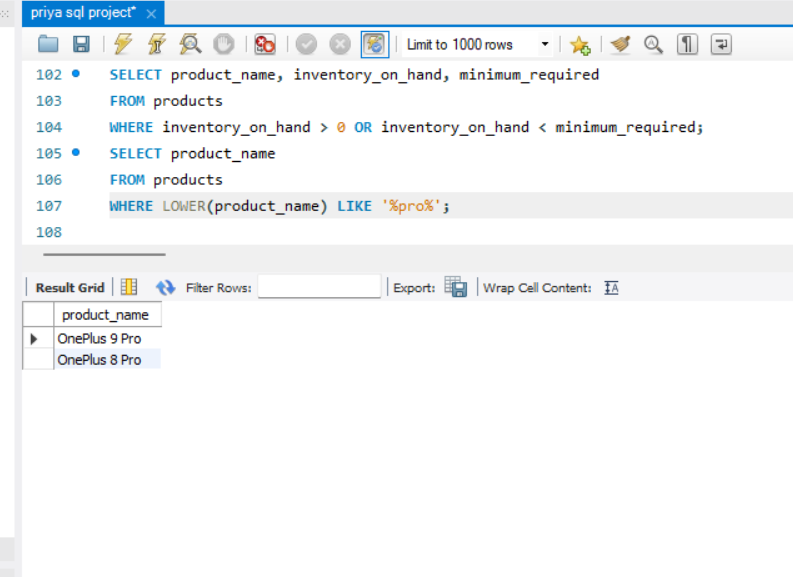


Q23. Write the query for product names that include the word 'pro' in a case-insensitive manner.

Ans. SELECT product\_name

FROM products

WHERE LOWER(product\_name) LIKE '%pro%';



Q24 Write the query To find products with starting inventory within a specific range between 50 and 100

Ans. SELECT product\_name, starting\_inventory

FROM products

WHERE starting\_inventory BETWEEN 50 AND 100

order by starting\_inventory desc;

