Q1) --1. GROUP BY with WHERE - Orders by Year and Quarter

---Display, order year, quarter, order count, avg freight cost only for those orders where freight cost > 100

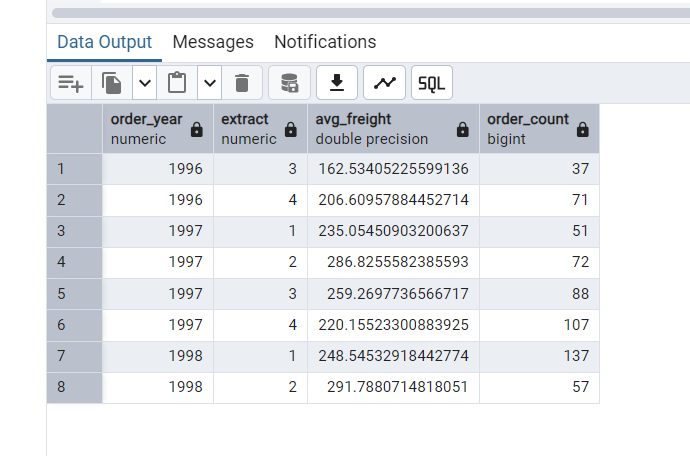
Query:

select \* from orders ---#order\_id, order\_date, avg\_freight

select \* from order\_details -- #quantity,order\_id

select extract(year from orders.order\_date) as order\_year, extract(quarter from orders.order\_date), avg(orders.freight) as avg\_freight, count(\*) as order\_count from orders inner join order\_details on orders.order\_id = order\_details.order\_id where freight> 100 group by 2,1 order by 1,2

Output:



Q2) ---2. GROUP BY with HAVING - High Volume Ship Regions

---Display, ship region, no of orders in each region, min and max freight cost

---Filter regions where no of orders >= 5

Query:

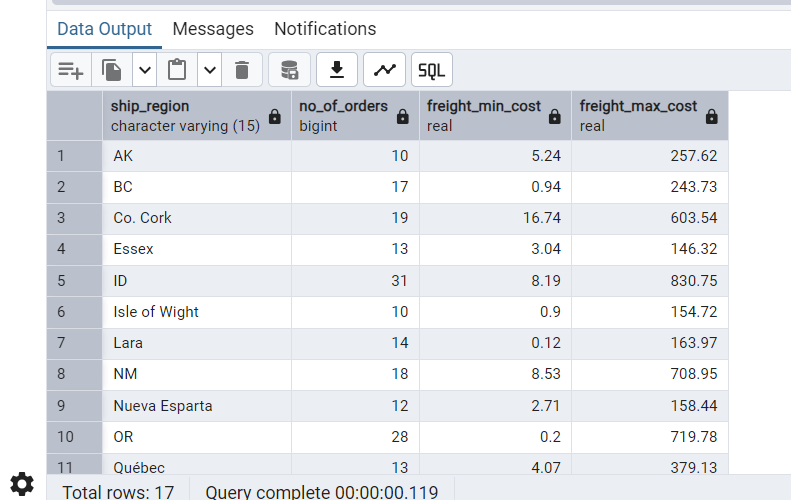
SELECT ship\_region, COUNT(\*)AS No\_of\_orders,MIN(freight) AS freight\_min\_cost, MAX(freight) AS freight\_max\_cost

FROM orders GROUP BY ship\_region

HAVING COUNT(\*) >= 5

ORDER BY ship\_region

Output:



Q3) Get all title designations across employees and customers ( Try UNION & UNION ALL)

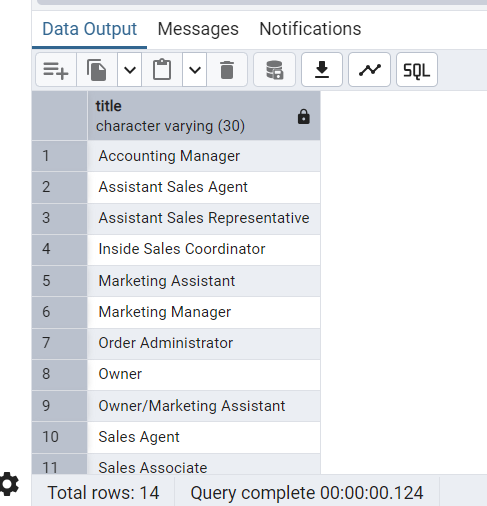
Query:

SELECT title FROM employees UNION

SELECT contact\_title FROM customers

ORDER BY title;

Output:



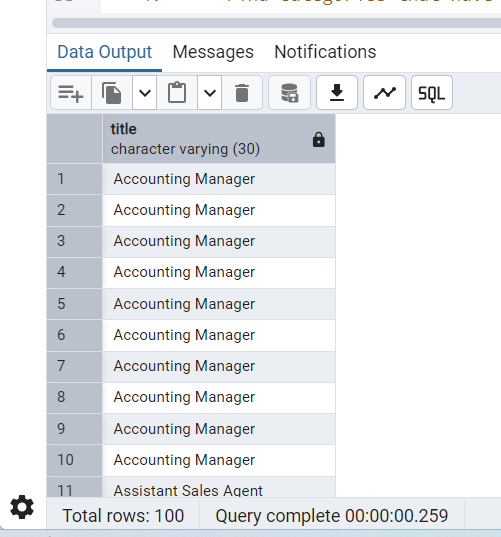
Query:

SELECT title FROM employees UNION ALL

SELECT contact\_title FROM customers

ORDER BY title;

Output:



Q4) --4.Find categories that have both discontinued and in-stock products

--(Display category\_id, instock means units\_in\_stock > 0, Intersect)

Query:

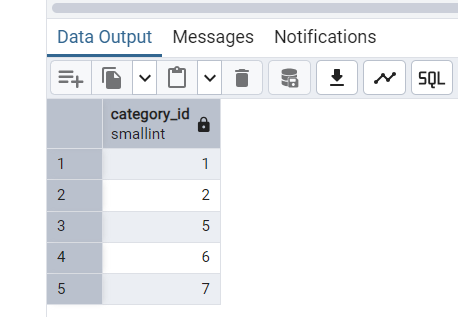
SELECT CATEGORY\_ID FROM PRODUCTS WHERE DISCONTINUED = 1

INTERSECT

SELECT CATEGORY\_ID FROM PRODUCTS WHERE UNITS\_IN\_STOCK > 0

ORDER BY CATEGORY\_ID;

Output:



5) Find orders that have no discounted items (Display the order\_id, EXCEPT)

Query:

SELECT DISTINCT order\_id FROM order\_details

EXCEPT SELECT DISTINCT order\_id FROM order\_details WHERE discount > 0

ORDER BY order\_id;

Output:

