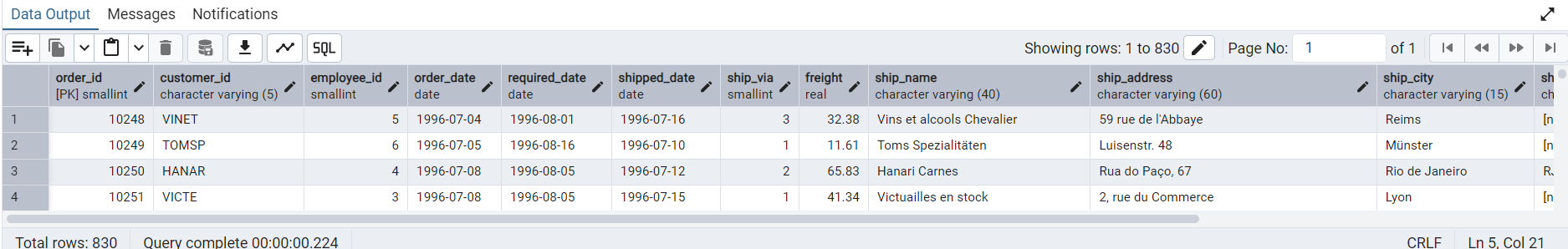
**Day 5**

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

**Before running the Query:**



**Query:**

SELECT

EXTRACT(YEAR FROM order\_date) AS order\_year,

EXTRACT(QUARTER FROM order\_date) AS order\_quarter,

COUNT(\*) AS order\_count,

AVG(freight) AS freight\_cost

FROM

orders

WHERE

freight > 100

GROUP BY

order\_year,

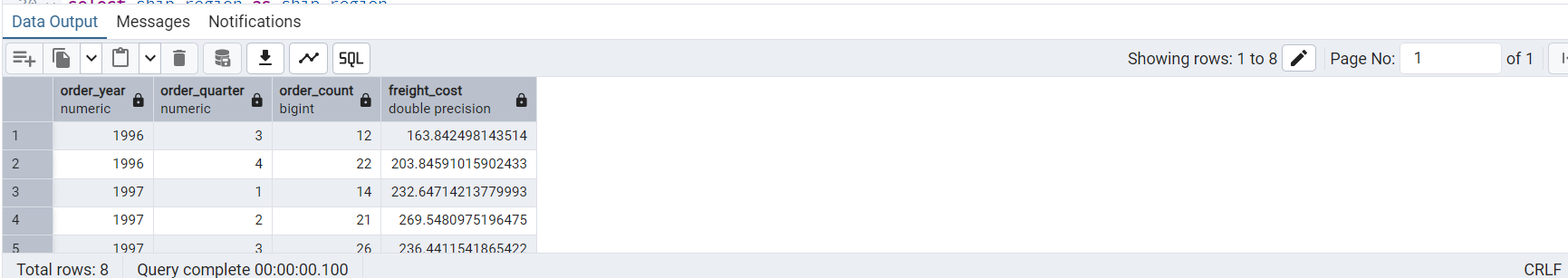
order\_quarter

ORDER BY

order\_year,

order\_quarter;

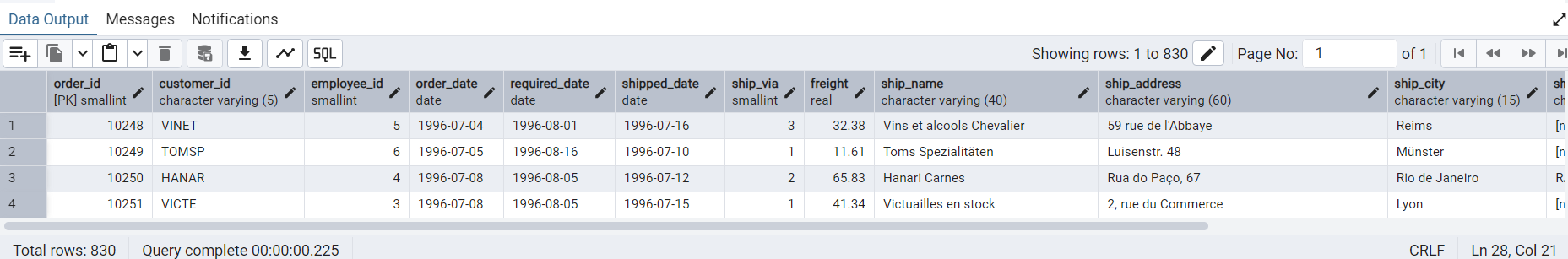
**Query Output:**



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

**Before running the query:**



**Query:**

select ship\_region as ship\_region,

COUNT(\*) AS order\_count,

min(freight) as min\_freight,

max(freight) as max\_freight

FROM

orders

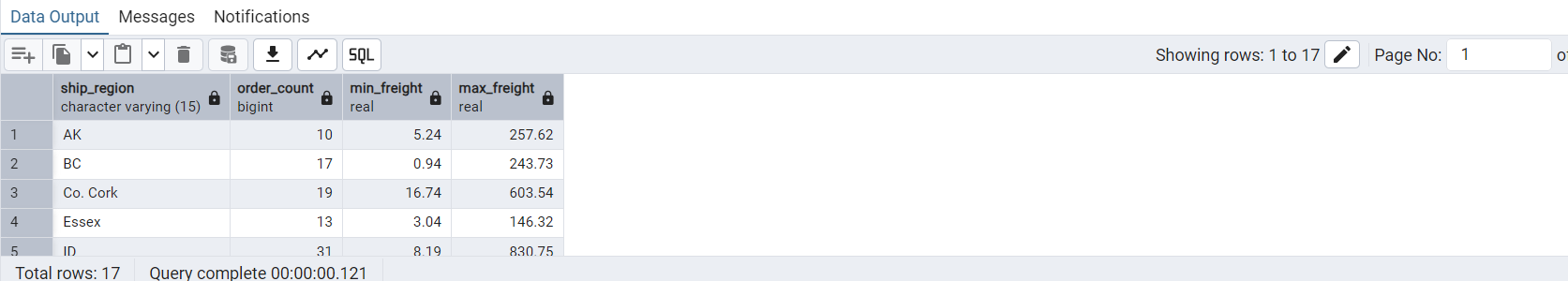
group by ship\_region

HAVING

COUNT(\*) >= 5

order BY ship\_region;

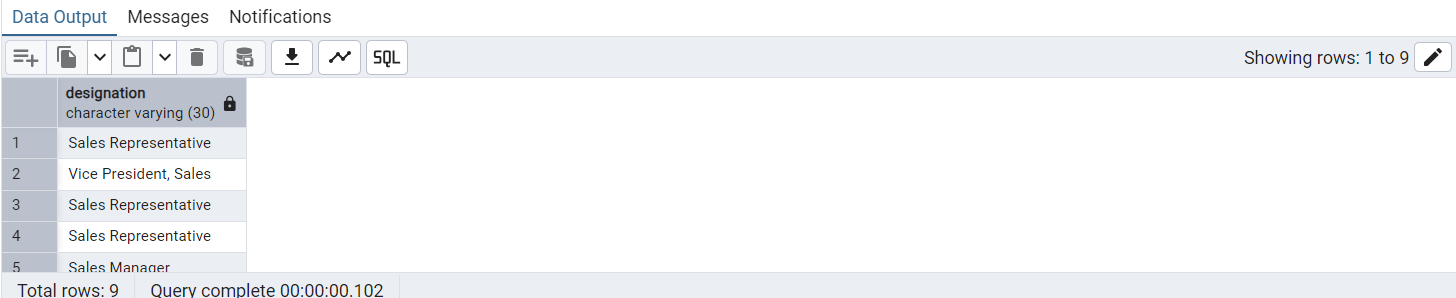
**Query Output:**

****

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

SELECT title AS designation

FROM employees



**--UNION -- UNION removes duplicates by default**

**Query:**

SELECT contact\_title AS designation

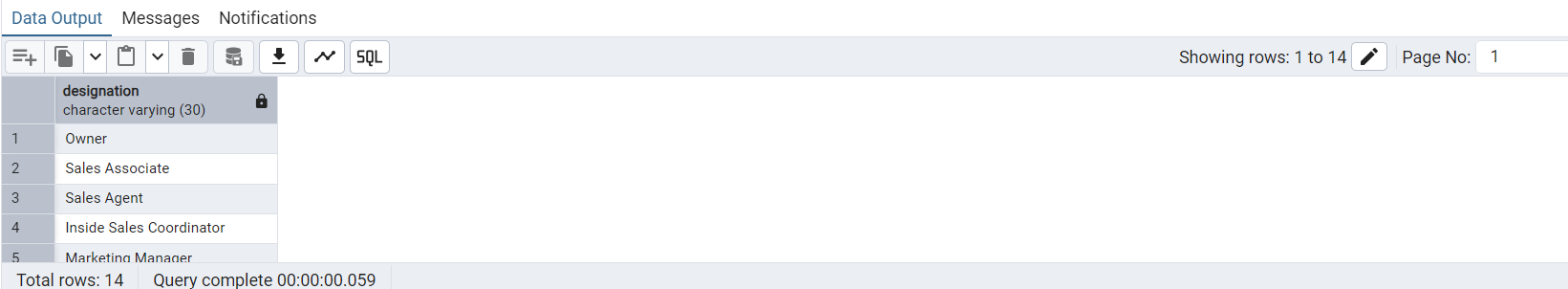
FROM customers

UNION

select title as designation

from employees

**Output:**



**UNION ALL -- UNION ALL includes all rows, including duplicates**

SELECT contact\_title AS designation

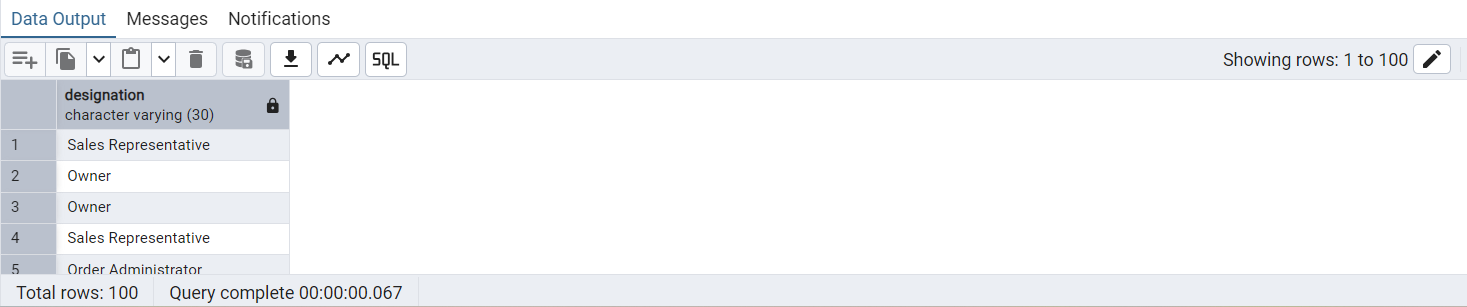
FROM customers

UNION ALL

select title as designation

from employees

**Output:**



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,

units\_in\_stock as instock

FROM products

WHERE product\_id IN (

SELECT product\_id

FROM products

WHERE discontinued = 1

)

INTERSECT

SELECT category\_id,

units\_in\_stock as instock

FROM products

WHERE product\_id IN (

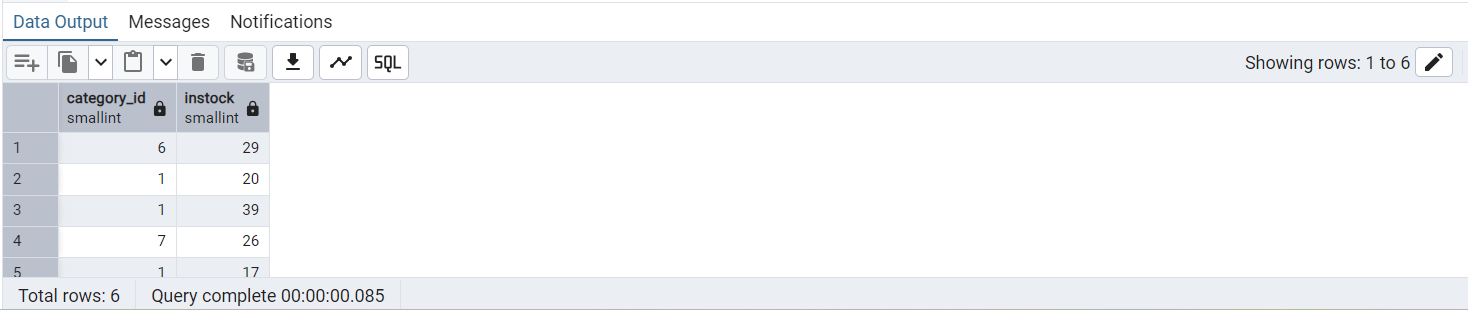
SELECT product\_id

FROM products

WHERE units\_in\_stock > 0

);

**Output:**



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

**Query**

SELECT order\_id

FROM orders

WHERE order\_id NOT IN (

SELECT order\_id

FROM order\_details

WHERE discount > 0

);

**Output:**

