--1.Rank employees by their total sales

--(Total sales = Total no of orders handled, JOIN employees and orders table)

SELECT E.EMPLOYEE\_ID,

E.FIRST\_NAME || ' ' || E.LAST\_NAME AS EMPLOYEE\_NAME,

COUNT (O.ORDER\_ID) AS NUMBER\_OF\_ORDERS,

RANK() OVER (ORDER BY COUNT (O.ORDER\_ID) DESC)

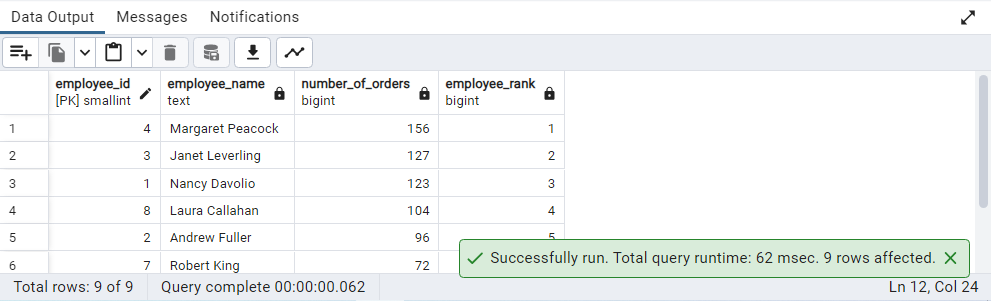
AS EMPLOYEE\_RANK

FROM ORDERS O

JOIN EMPLOYEES E ON O.EMPLOYEE\_ID = E.EMPLOYEE\_ID

GROUP BY E.EMPLOYEE\_ID

ORDER BY EMPLOYEE\_RANK;



--2.Compare current order's freight with previous and next order for each customer.

--(Display order\_id, customer\_id, order\_date, freight, Use lead(freight) and lag(freight).

--Lag()

SELECT ORDER\_ID,

CUSTOMER\_ID,

ORDER\_DATE,

FREIGHT,

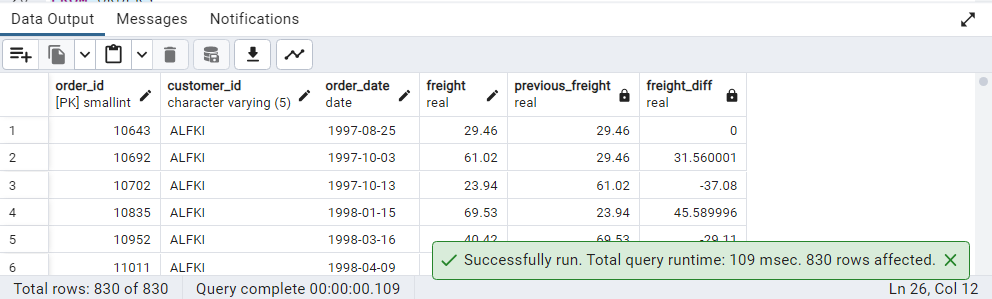
LAG (FREIGHT, 1, FREIGHT)

OVER (PARTITION BY CUSTOMER\_ID ORDER BY ORDER\_DATE) AS PREVIOUS\_FREIGHT,

FREIGHT - LAG (FREIGHT, 1, FREIGHT)

OVER (PARTITION BY CUSTOMER\_ID ORDER BY ORDER\_DATE) AS FREIGHT\_DIFF

FROM ORDERS



--Lead()

SELECT ORDER\_ID,

CUSTOMER\_ID,

ORDER\_DATE,

FREIGHT,

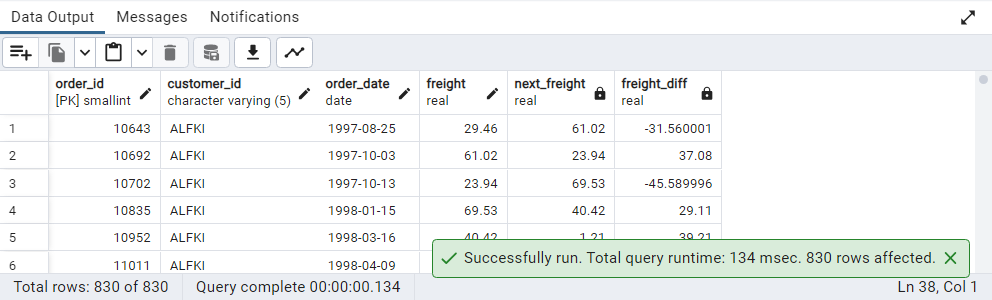
LEAD (FREIGHT, 1, FREIGHT)

OVER (PARTITION BY CUSTOMER\_ID ORDER BY ORDER\_DATE) AS NEXT\_FREIGHT,

FREIGHT - LEAD (FREIGHT, 1, FREIGHT)

OVER (PARTITION BY CUSTOMER\_ID ORDER BY ORDER\_DATE) AS FREIGHT\_DIFF

FROM ORDERS



--3.Show products and their price categories, product count in each category, avg price:

-- (HINT: Create a CTE which should have price\_category definition:

--WHEN unit\_price < 20 THEN 'Low Price'

--WHEN unit\_price < 50 THEN 'Medium Price'

--ELSE 'High Price'

--In the main query display: price\_category, product\_count in each price\_category,

--ROUND(AVG(unit\_price)::numeric, 2) as avg\_price)

WITH price\_category\_cte AS (

SELECT product\_id, unit\_price,

CASE

WHEN unit\_price < 20 THEN 'Low Price'

WHEN unit\_price <50 THEN 'Medium Price'

ELSE

'High Price'

END AS price\_category

FROM products

)

SELECT price\_category, COUNT (product\_id) AS product\_count,

ROUND (AVG (unit\_price) :: numeric, 2) AS avg\_price

FROM price\_category\_cte

GROUP BY price\_category

