Day 7 Assignment SQL

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,

COUNT(O.order_id) AS total_orders,

RANK() OVER (ORDER BY COUNT(O.order_id) DESC) AS rank

FROM

Employees E

LEFT JOIN

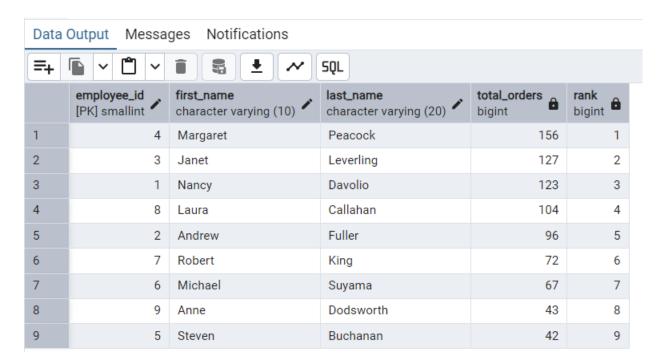
Orders O ON E.employee_id = O.employee_id

GROUP BY

E.employee_id

ORDER BY

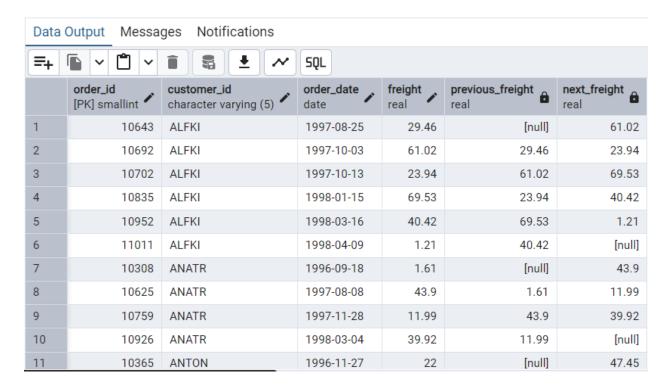
total_orders DESC;
```



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).

```
SELECT
order_id,
customer_id,
order_date,
freight,
LAG(freight) OVER (PARTITION BY customer_id ORDER BY order_date) AS
previous_freight,
LEAD(freight) OVER (PARTITION BY customer_id ORDER BY order_date) AS
next_freight
FROM
Orders
ORDER BY
customer_id,
order_date;
```



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 PriceCategories AS (
SELECT
product_id,
product_name,
```

```
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
  PriceCategories
GROUP BY
  price_category
ORDER BY
 price_category;
 Data Output Messages
                       Notifications
                                      SQL
 =+
      price_category
                    product_count
                                  avg_price
                    bigint
       High Price
                                6
                                      109.13
       Low Price
                                       13.30
 2
                               34
 3
       Medium Price
                               27
                                       30.92
```