Batch D – Week 4

- **Year-over-Year Growth in Sales per Category**

Write a query to calculate the total annual sales per product category for the current and previous
year, then use window functions to calculate the year-over-year growth percentage

- **Customer's Purchase Rank Within Store**

Write a SQL query to find each customer's purchase rank within the store they bought from, based
on the total price of the order (quantity * unit price).

- **Customer Retention Analysis**

Perform a customer retention analysis to determine the percentage of customers who made repeat
purchases within three months of their initial purchase. Calculate the percentage of retained
customers by gender, age group, and location.

- **Optimize the product mix for each store location to maximize sales revenue**

Analyze historical sales data to identify the top-selling products in each product category for each
store. Determine the optimal product assortment for each store based on sales performance,
product popularity, and profit margins.