Task 1: Exploratory Data Analysis (EDA)

Summary of Analysis

The EDA provided key insights into customer demographics, product performance, and transaction patterns. The following are the top insights derived:

Business Insights

1. **Region-wise Distribution**:
   o Most customers are concentrated in **North America** and **Europe**, indicating strong market penetration in these regions.
   o Regions such as South America and Africa have lower customer counts, presenting potential growth opportunities.
2. **Top Products by Revenue**:
   o The top 3 products contributing to revenue are **Product A**, **Product B**, and **Product C**.
   o Focus on promoting these products further to maximize profits.
3. **Seasonal Trends**:
   o Revenue peaks in **November and December**, indicating a spike in sales during the holiday season.
   o Tailor marketing campaigns around this time to capitalize on seasonal demand.
4. **Category Performance**:
   o The **Electronics** category generates the highest revenue, followed by **Home Appliances**.
   o Consider expanding the product portfolio in these categories.
5. **Customer Lifetime Value**:
   o The top 10 customers contribute significantly to the total revenue. Retention strategies for these high-value customers can improve profitability.