## Part - 1: EDA Business Insight:

Answer:

## **Technical Insights**

- 1.Customer Distribution Analysis: The dataset indicates a significant concentration of customers in North America. This finding suggests that marketing strategies should prioritize this region to enhance engagement and drive sales.
- 2.High-Value Product Categories: Our analysis reveals that electronics consistently generate the highest average transaction values. This insight underscores the importance of focusing marketing efforts on high-end electronics to substantially boost revenue.
- 3.Seasonal Sales Trends: Transaction data highlights notable spikes in sales during holiday seasons, particularly around Black Friday and Christmas. Implementing targeted promotions during these peak times could capitalize on increased consumer spending.
- 4.Repeat Purchase Behavior: The analysis identifies a substantial number of repeat purchases among specific customers. This finding emphasizes the potential for loyalty programs to improve customer retention and increase overall lifetime value.
- 5. Pricing Strategy Impact: A negative correlation exists between product price and quantity sold in certain categories. This suggests that adopting competitive pricing strategies may be essential for enhancing sales volume, particularly for lower-priced items.

## **Basic Understanding From My POV:**

- -> Where Are Our Customers?: Most of our customers are based in North America, so we should concentrate our advertising efforts there to attract more buyers.
- -> Best-Selling Products: Electronics are our top-selling products, making them an excellent focus for promotions and marketing campaigns to boost sales.
- -> Holiday Shopping Spree: We observe significant increases in sales during holidays like Christmas and Black Friday. Offering special deals during these times could help us sell even more products.
- -> Loyal Customers: Some customers frequently return to make purchases from us again. We could implement rewards or loyalty programs to encourage them to shop with us more often.
- -> Price Matters: Our analysis shows that lower-priced products tend to sell better. Adjusting our prices to be more competitive could help us increase overall sales.