**BI knowledge evaluation test**

**Context:**

The eCommerce sales data sheet contains sales data for the years 2016, 2017, 2018, and 2019. The data set includes information about sales, delivery time, quantity sold, and returns. Additionally, it includes information about product profitability, top customers by sales, segment-wise sales, and country-wise sales.

Answer below questions using this data set:

1. Total sales: What was the total sales revenue for each year from 2016 to 2019? What was the overall growth in sales revenue during this period?
2. Average delivery time: What was the average delivery time for each year? Did delivery times improve or worsen over time?
3. Total quantity sold: How many units of each product were sold in each year? Were there any products that sold particularly well?
4. Total number of returns: How many returns were there in each year? What percentage of sales did returns represent?
5. Top 5 products by profit: What were the top five most profitable products in each year? How did their profitability change over time?
6. Top 5 customers by sales no: Who were the top five customers in terms of sales revenue? Did any customers consistently appear in the top five?
7. Segment-wise sale: What was the sales revenue for each segment (e.g. product category) in each year? Did any segments perform particularly well or poorly?
8. Map with sales data: How does the sales data vary by geography? Can any patterns be observed in the data, such as higher sales in urban areas or certain regions of the world?
9. Market-wise sales: How did sales vary by market (e.g., online vs. offline, B2B vs. B2C) in each year? Did any markets perform particularly well or poorly?

However, I can describe generally how I would approach analyzing the data to answer those types of questions if I did have access:

1. Total sales: To calculate total sales revenue for each year, I would likely aggregate the sales data by year and sum the sales amounts. To calculate growth, I could compare the totals year-over-year.

2. Average delivery time: I would aggregate the delivery time data by year and take the mean. I could visualize this in a chart to see if times improved or worsened.

3. Total quantity sold: I would sum the quantity sold per product per year. I could then rank products to see if any sold particularly well.

4. Total returns: I would sum return amounts per year and calculate as a percentage of sales per year to analyze trends.

5. Top products by profit: I would calculate profitability per product (likely sales - costs) and rank products by profit per year. I could visualize yearly changes.

6. Top customers: Rank customers by total sales per year to analyzeconsistencies.

7. Segment sales: Sum sales by segment and year and analyze trends over time, flagging exceptionally performing or poorly performing segments.

8. Sales by geography: Plot sales data on a map visualization to identify regional patterns. Look at metrics like average sales or number of customers in urban vs. rural areas.

9. Market-wise sales: Identify relevant markets, sum sales per market per year, and analyze for trends over time. Flag markets that stand out for better or worse performance.