# Objective

→ The store owner wants me to prepare an in-depth annual sales report for 2023 to facilitate customer understanding and drive data-driven sales strategies for increased revenue in 2024.

# Sample Questions

- 1. Which month got the highest sales and orders?
- 2. Who purchased more- men or women in 2023?
- 3. What are the different order status in 2023?
- 4. List top states contributing to the sales?
- 5. Relation between age and gender based on number of orders
- 6. Which channel is contributing to maximum sales?

#### Steps

### **Data Cleaning**

- 1. Initial Review: Begin by examining all data points to ensure they address our business problems.
- 2. Quality Check: Apply filters to each column to identify any incorrect, missing, or null values.
- 3. Standardize Entries: Convert 'M' and 'W' to 'Men' and 'Women' respectively to eliminate inconsistencies.
- 4. Consolidate Values: Change 'One' and 'Two' to '1' and '2' for uniformity.

#### **Data Processing**

- 1. Age Segmentation: Introduce a new column labeled 'Age Group' to classify customers as 'Teenager', 'Adult', or 'Senior'. This helps identify which age groups are purchasing the most.
- 2. Monthly Analysis: Extract the month from the date column, add this data to a new 'Month' column, and convert it to month name to analyze sales trends over time.
- 3. Highlight New Data: Emphasize newly calculated columns for easier visibility and analysis.

#### **Data Analysis**

- 1. Monthly Sales Analysis: Use a pivot table to review sales data by month, focusing on the total amount spent and the number of orders.
- 2. Gender Sales Analysis: Another pivot table should assess sales by gender, highlighting differences in spending patterns.
- 3. Order Status Review: Create a pivot table to examine the status of orders, looking specifically at the volume of orders in each category.
- 4. Top States by Sales: A pivot table to identify the top five states by sales volume will help focus regional marketing efforts.
- 5. Demographic Purchasing Patterns: Analyze which age groups are purchasing most frequently and segment this by gender using a pivot table.
- 6. Website Performance: Determine which website platforms generate the most sales using a pivot table that correlates websites with order counts.

#### **Data Visualization**

- 1. Comprehensive Charting- Develop charts and graphs to visually summarize key sales data points, such as Order vs. Sales, Top 5 States by Sales, Sales by Gender, Age vs. Gender Distribution, Delivery Status, and Top Performing Websites.
- 2. Reporting- Compile the insights into a structured report, outline key findings, and recommend strategic actions to boost future sales.

By following this structured approach I effectively clean, process, analyze, and visualize the data to drive informed business decisions and improve sales outcomes.

# Insights

- 1. March have the most sales with 94% of successful deliveries
- 2. Women are more likely to buy compared to men (~65%)
- 3. Delivered 92%, Canceled 3%, Returned 3%, refunded 3%
- 4. Maharashtra, Karnataka and Uttar Pradesh are the top 3 states (~35%)
- 5. Adult age group (30-49 yrs) is max contributing (~50%)
- 6. Amazon, Flipkart and Myntra channels are max contributing (~80%)

# • Final Conclusion to improve Vrinda store sales

→ Target women customers of age group (30-49 yrs) living in Maharashtra, Karnataka and Uttar Pradesh by showing ads/offers/coupons available on Amazon, Flipkart and Myntra.