# PROBLEM STATEMENT

**KPI'S REQUIREMENTS**

1. Total Sales Analysis:

• Calculate the total sales for each respective month.

• Determine the month-on-month increase or decrease in sales.

• Calculate the difference in sales between the selected month and the previous month.

2. Total Orders Analysis:

• Calculate the total number of orders for each respective month.

• Determine the month-on-month increase or decrease in the number of orders.

• Calculate the difference in the number of orders between the selected month and the previous month.

3. Total Quantity Sold Analysis:

• Calculate the total quantity sold for each respective month.

• Determine the month-on-month increase or decrease in the total quantity sold.

• Calculate the difference in the total quantity sold between the selected month and the previous month.

**Chart’s Requirements:**

**1. Calendar Heat Map**:

• Implement a calendar heat map that dynamically adjusts based on the selected month from a slicer.

• Each day on the calendar will be color-coded to represent sales volume, with darker shades indicating higher sales.

• Implement tooltips to display detailed metrics (Sales, Orders, Quantity) when hovering over a specific day.

**2. Sales Analysis by Weekdays and Weekends:**

• Segment sales data into weekdays and weekends to analyze performance variations.

• Provide insights into whether sales patterns differ significantly between weekdays and weekends.

**3. Sales Analysis by Store Location:**

• Visualize sales data by different store locations.

• Include month-over-month (MoM) difference metrics based on the selected month in the slicer.

• Highlight MoM sales increase or decrease for each store location to identify trends.

**4. Daily Sales Analysis with Average Line:**

• Display daily sales for the selected month with a line chart.

• Incorporate an average line on the chart to represent the average daily sales.

• Highlight bars exceeding or falling below the average sales to identify exceptional sales days.

**5. Sales Analysis by Product Category**:

• Analyse sales performance across different product categories.

• Provide insights into which product categories contribute the most to overall sales.

**6. Top 10 Products by Sales:**

• Identify and display the top 10 products based on sales volume.

• Allow users to quickly visualize the best-performing products in terms of sales.

**7. Sales Analysis by Days and Hours:**

• Utilize a heat map to visualize sales patterns by days and hours.

• Implement tooltips to display detailed metrics (Sales, Orders, Quantity) when hovering over a specific day-hour.