# **Coffee Shop Sales Analysis**

Develop a Power BI project focused on analyzing sales data for a coffee shop. The project aims to construct a comprehensive dashboard that provides actionable insights into various aspects of sales performance, including total sales, order analysis, sales trends by time and location, and product performance.

#### **Problem Statement**

### **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 previous month.

#### **Total Order 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 previous month.

# **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 previous month.

#### **Chart Requirements:**

#### 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 colour coded to represent sales volume, with darker shades indicating higher sales.
- Implement tooltips to display detailed metrics when hovering over a specific day.

#### Sales Analysis by Weekdays and Weekends:

- Segment sales data into weekdays and weekends to analyze performance variations.
- Provide insights into whether sales patterns differ between weekdays and weekends.

#### 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 elicer
- Highlight MoM sales increase or decrease for each store location to identify trends.

# **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.

### Sales Analysis by Product Category:

- Analyze sales performance across different product categories.
- Provide insights into product categories that contribute the most to overall sales.

#### **Top 10 Product 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.

### 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.