# DA-Assignment-I

## Visualisations:

- Bar Chart
- Pie Chart
- Stacked Bar Chart
- Line Chart
- Bubble Chart

Dataset: Link

### BAR CHART: Sales by product line and branch

This stacked bar chart shows the **total sales** across different **product lines**, further **segmented by branch** (Yangon - A, Mandalay - B, and Naypyitaw - C). Each bar represents a product category, and each color block within the bar represents one branch's contribution.

- City-Branch A
  City-Branch B
- City-Branch C



PIE CHART: Category-wise payment preference

This visualization presents a breakdown of **payment method preferences across various product lines** in the supermarket dataset. Each pie chart represents a **product category** and is segmented by three payment methods:

- Cash (Blue)
- Credit Card (Orange)
- Ewallet (Red)



## STACKED BAR CHART: Branch-wise Customer Segmentation

This stacked bar chart visualizes the distribution of customer types (Member vs Normal) across the three different store branches (A, B, and C). Each bar represents the total quantity of purchases made in a branch, segmented by customer type using distinct colors.

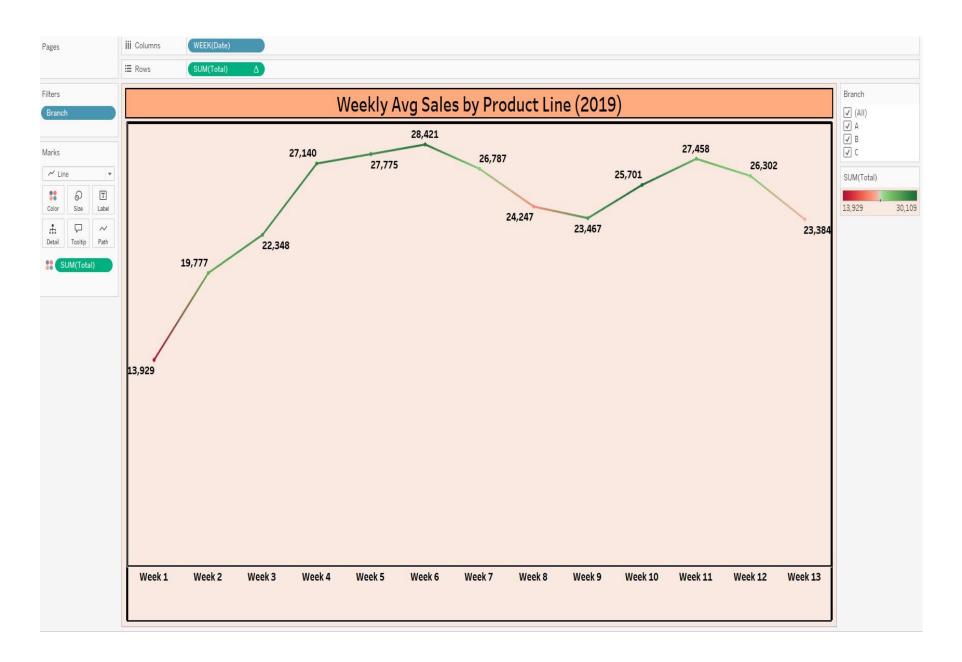
- Orange indicates purchases made by Normal customers,
- Blue indicates purchases made by Member customers.



#### LINE CHART: Weekly Avg Sales by Product Line (2019)

This line chart shows the **weekly moving average of total sales** for 2019. It highlights overall sales trends by smoothing daily fluctuations. Each point is labeled with the weekly average value.

A **Branch filter** allows users to view performance by location (A, B, or C). This helps identify peak sales periods and monitor weekly performance patterns.



BUBBLE CHART: Sales by Gender and Product Line

This bubble chart displays **sales performance by product line and gender**, offering a clear comparison of consumer behavior across male and female customers. Each bubble represents a unique **gender-product line combination**, with its **size proportional to total sales** volume and **color-coded by gender** for easy visual segmentation.

By using the Branch and Customer Type filters, users can explore how preferences vary:

- Across different store locations (Branches A, B, C)
- Between Members and Normal customers

