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- **Course**: Data Analytics with Tableau
- **Assignment:** Assignment 2

Assignment 1: Data Analytics with Tableau

Title:

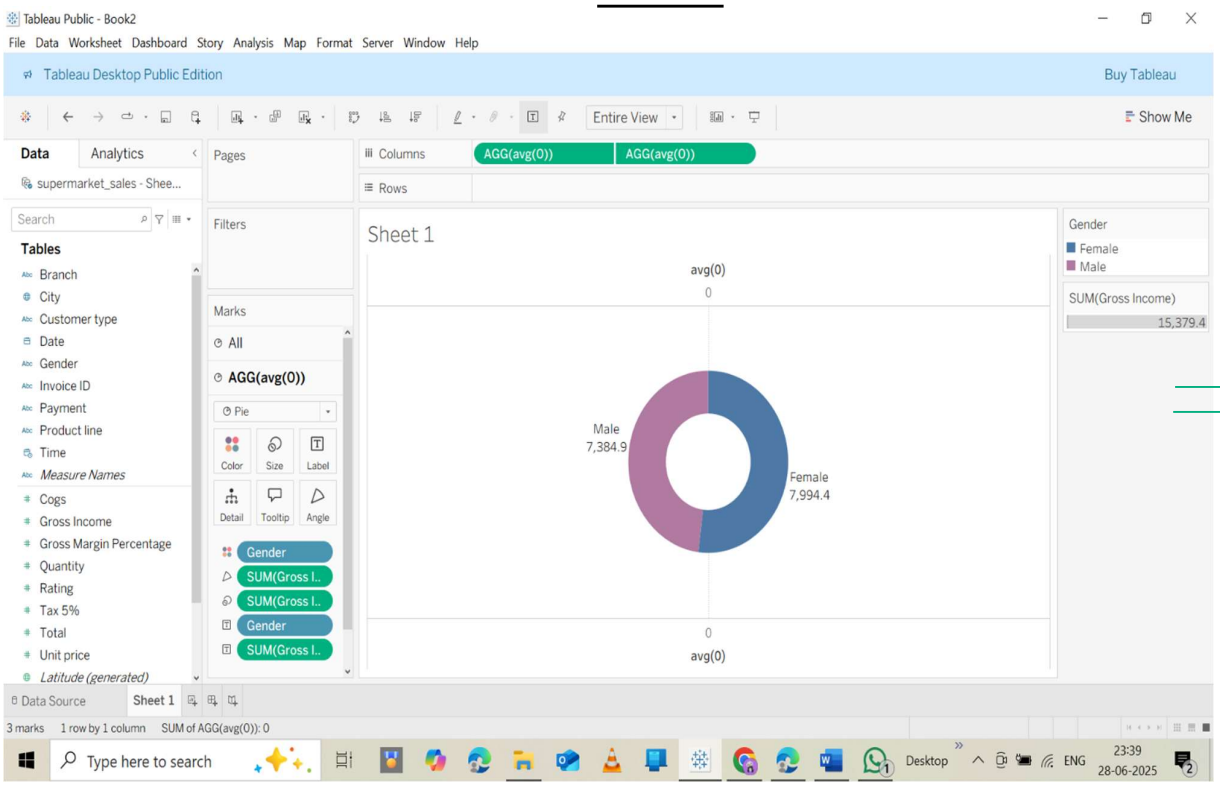
Supermarket Sales Data Visualization and Analysis

Introduction:

This assignment focuses on analyzing supermarket sales data collected from three branches over a period of three months. Using Tableau, various visualizations were created to understand sales trends, customer distribution, and product performance. The insights Tom this analysis can help the supermarket improve decision-making, marketing strategies, and customer experience.

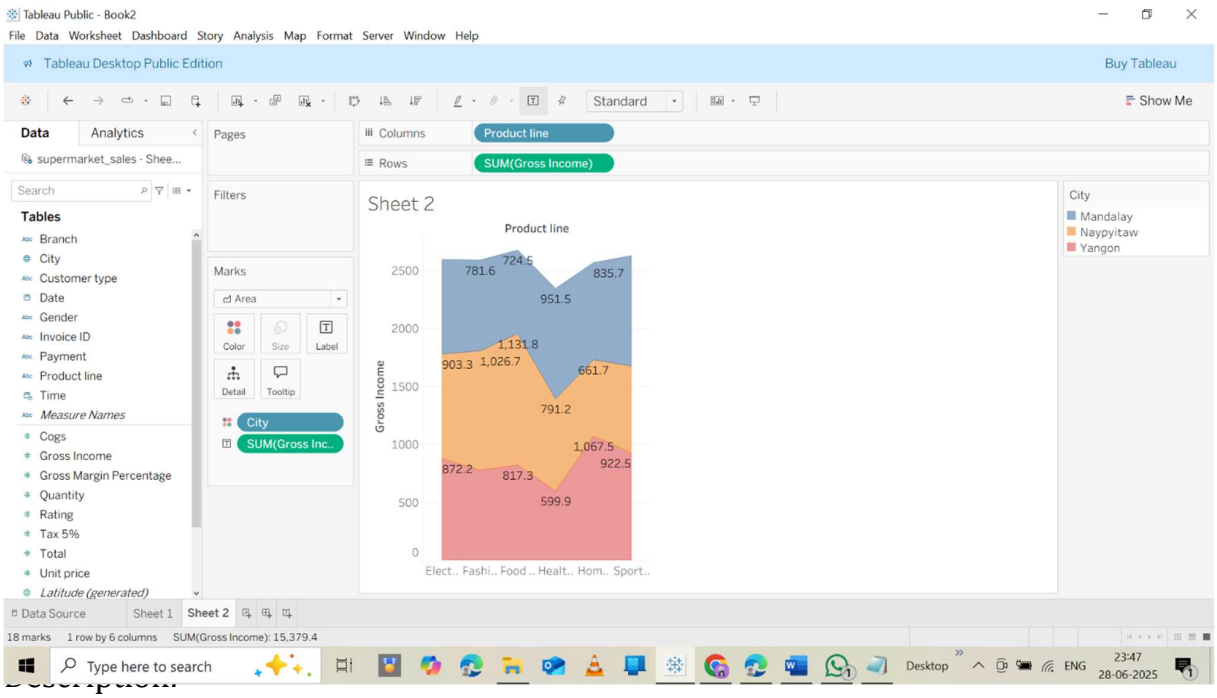
Visualizations:

1. **Donut Chart**: Gross Income distribution by Gender



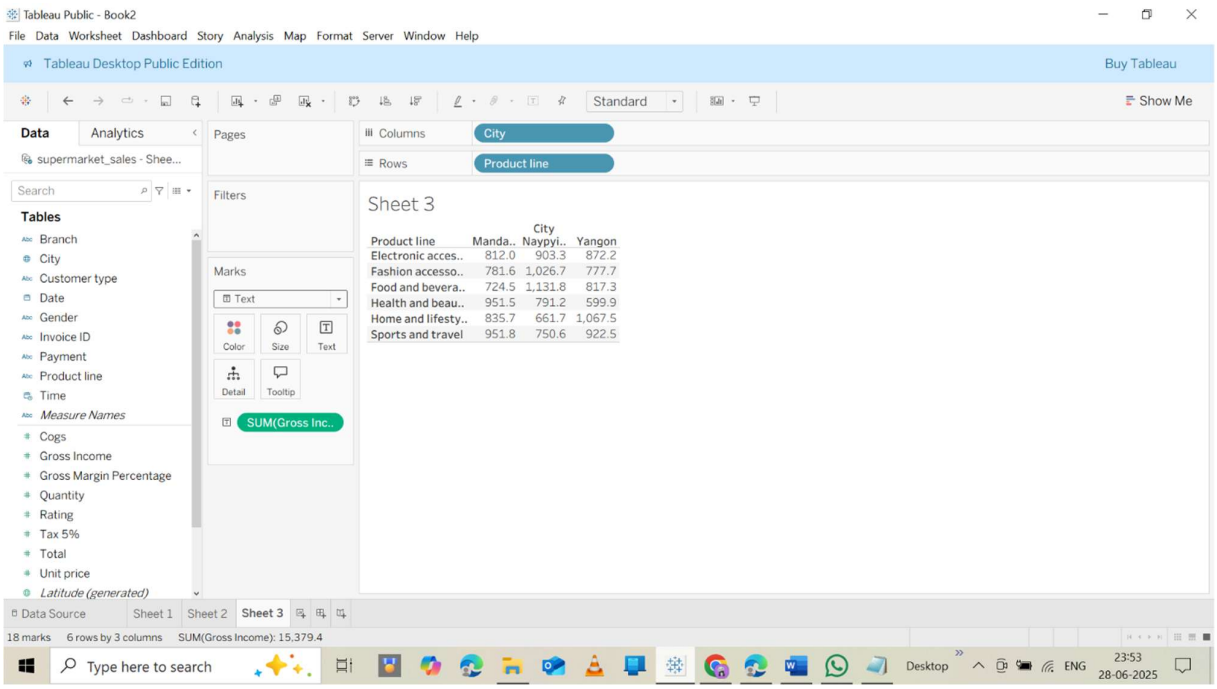
- **Description**: This donut chart displays the Gross Income distribution by Gender.Each segment shows the proportion of income from Male and Female customers.The central hole provides a cleaner, more modern look than a standard pie chart.

2.Area chart: Gross Income across different Product Lines, segmented by City



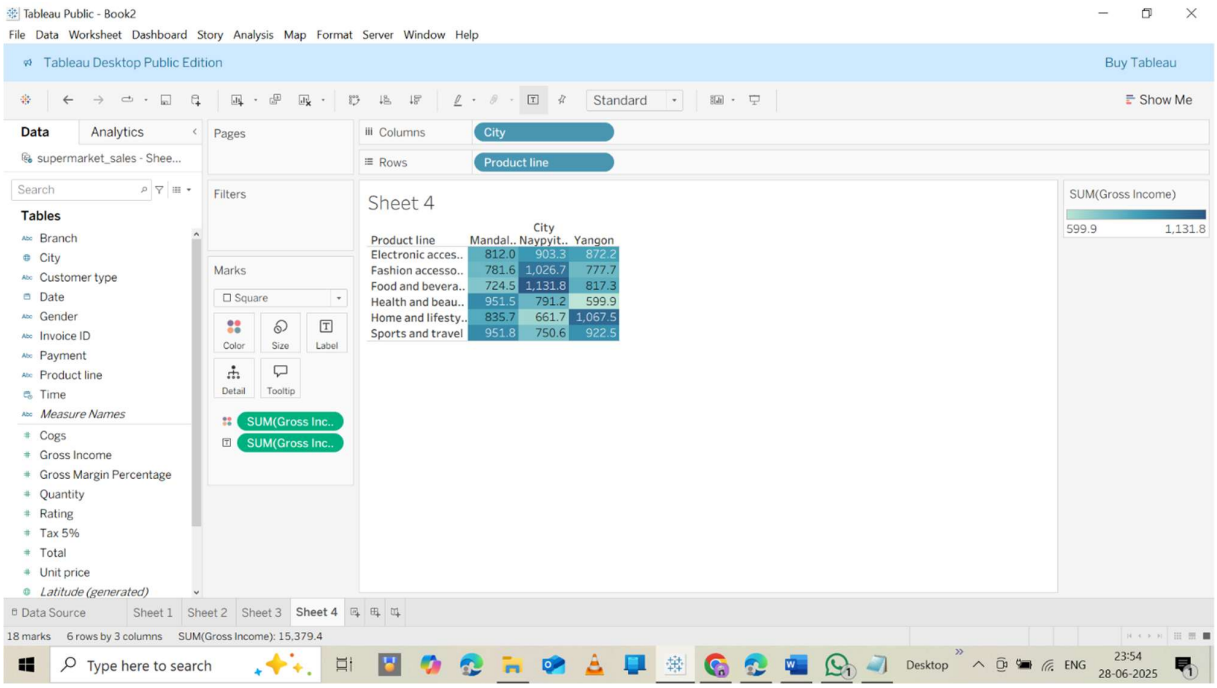
- **Description**: This area chart illustrates Gross Income across different Product Lines, segmented by CityEach colored area represents income contribution from each city, making it easy to compare regional performance.The value labels on the chart help in identifying the exact income figures for each city within each product category.

3.Text Table: Gross Income values across Product Lines and Cities in a grid format



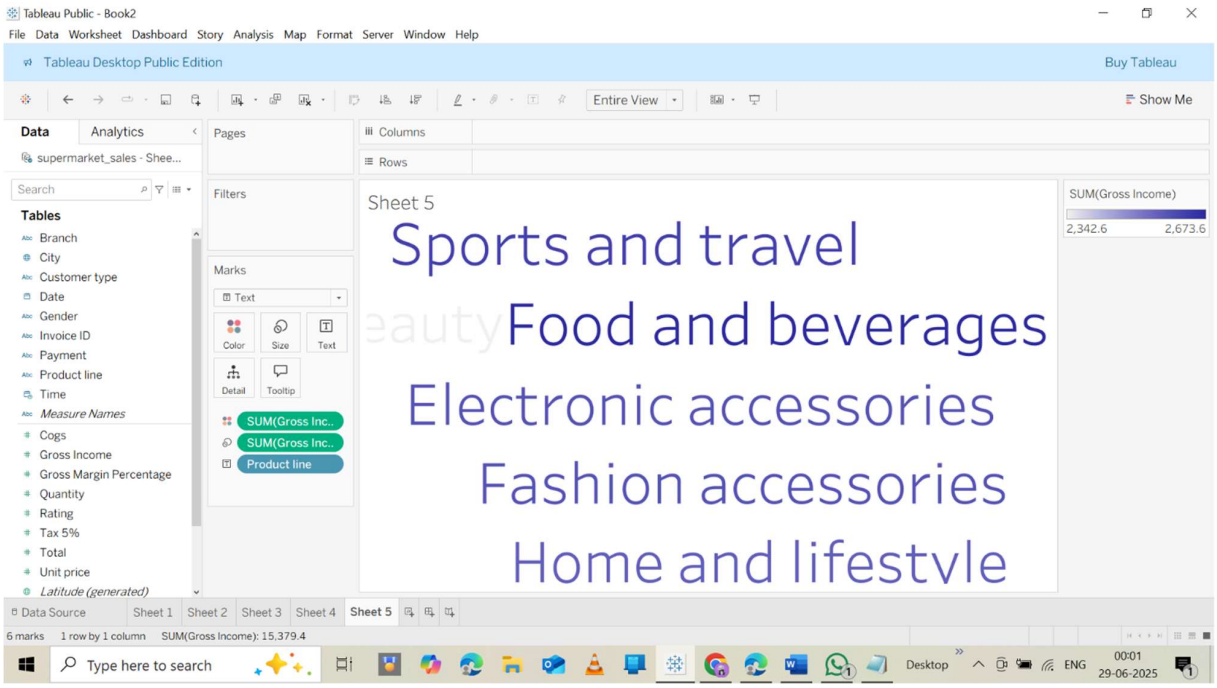
- **Description:** This text table presents Gross Income values across Product Lines and Cities in a grid format.Each cell shows the exact income value for a specific city and product category.It's ideal for precise comparisons where numerical accuracy is more important than visual trends.

4.Highlighted chart: Gross Income values by Product Line and City



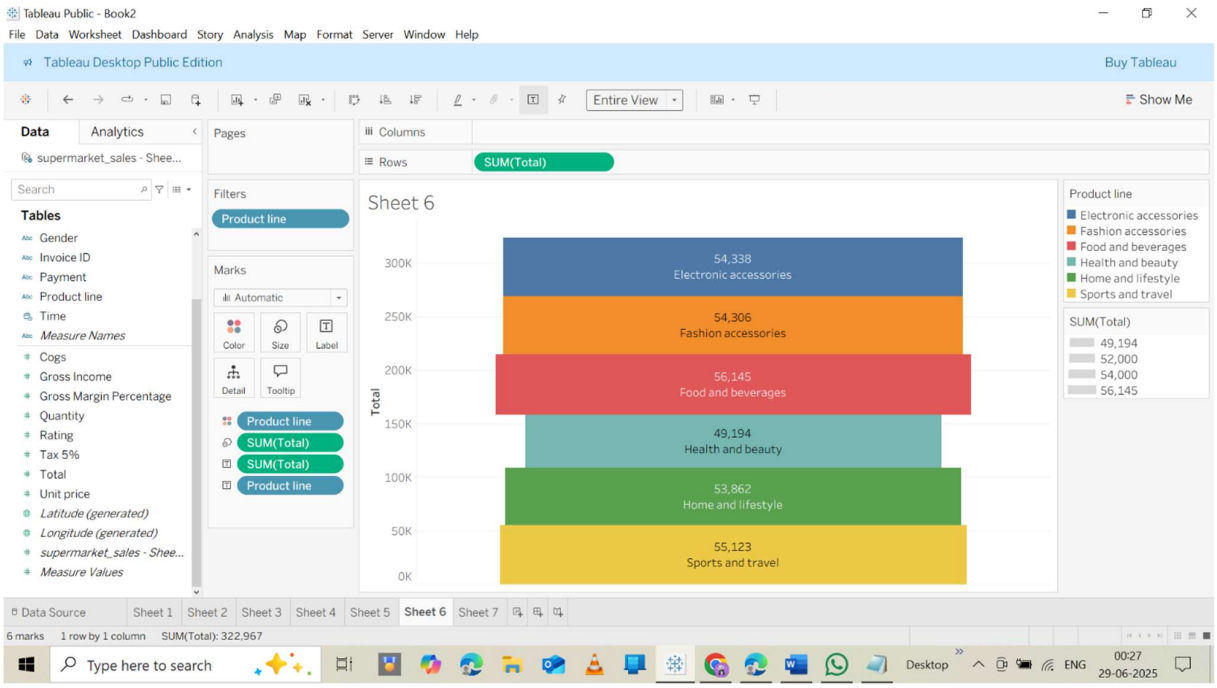
- **Description:** This highlighted table displays Gross Income values by Product Line and City, with color intensity representing income magnitude.Darker shades indicate higher revenue, helping visually compare performance across cities and categories .It combines the precision of a text table with the insight of a heatmap for easy analysis.

5.WordCloud: Product Line based on Gross Income



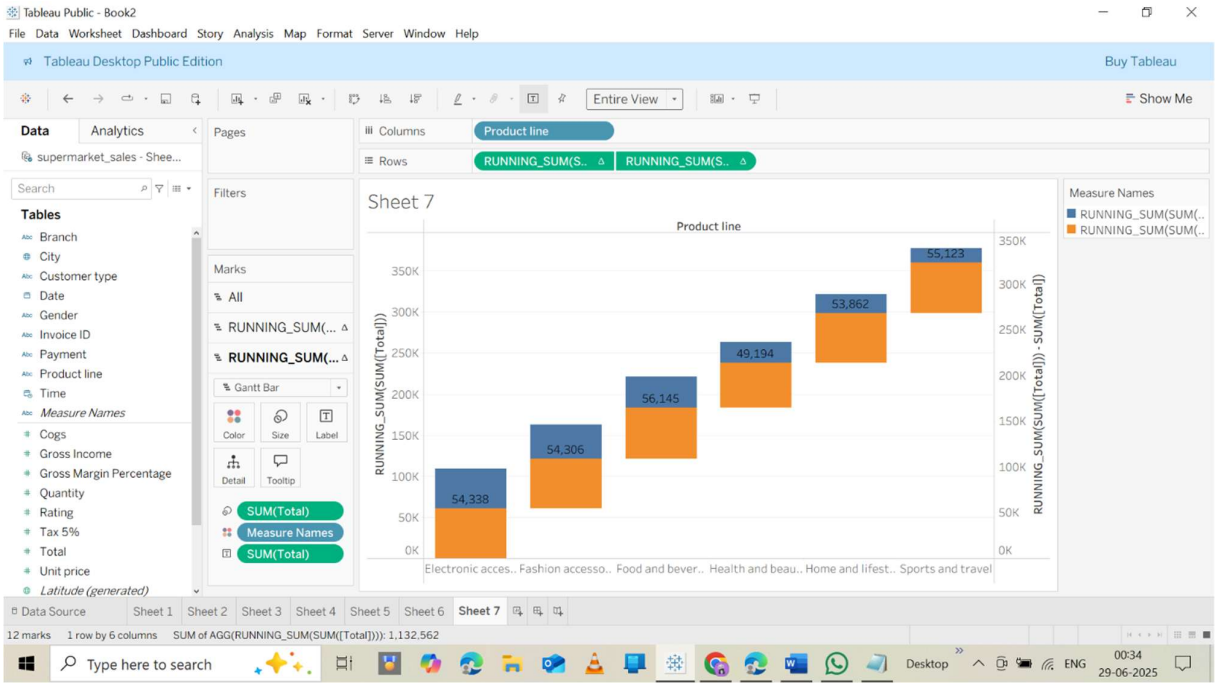
- **Description:** This word cloud represents Product Lines, where the size of each word reflects Gross Income.Larger words indicate higher revenue-generating categories, making key performers easy to identify.It offers a quick, visual summary of which product lines contribute most to total income

6.Funnel Chart: Total Sales across different Product Lines



- **Description:** This funnel chart displays Total Sales across different Product Lines, sorted from highest to lowest.Each bar represents a product line, and the funnel shape highlights the drop-off in sales volume.It's useful for identifying top-performing categories and sales concentration.

7.WaterFall Chart: Product Line contributes to Total Sales



- **Descripion**: This waterfall chart shows how each Product Line contributes to Total Sales step-by-step.Bars start from the previous level and add or subtract based on that category's value.It helps visualize cumulative impact and identify key gainers or loss-makers.

- ## Conclusion:

The analysis offers a clear understanding of business performance using key metrics like Total Sales and Gross Income.
Data across Product Lines, Customer Types, and Cities was compared to identify high-performing areas.
The revenue distribution shows significant variation based on customer demographics and product categories.
Sorting and labeling values helped reveal patterns and contributions from each business segment.
Overall, this supports better decision-making by highlighting strengths, gaps, and opportunities in the data.