ASSIGNMENT-1

Subject: Data Analytics

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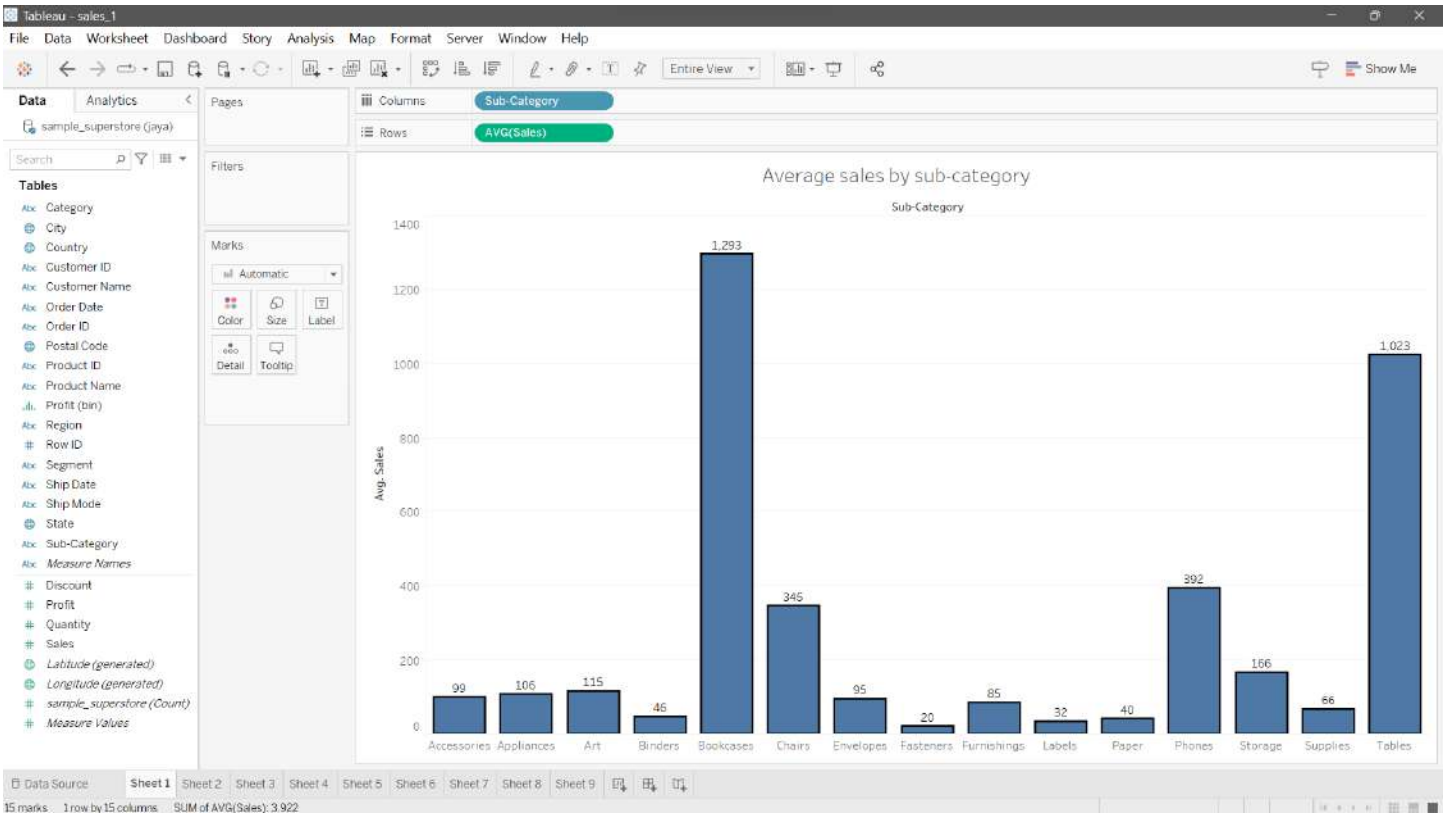
Creating 5 different data visualization charts using tableau

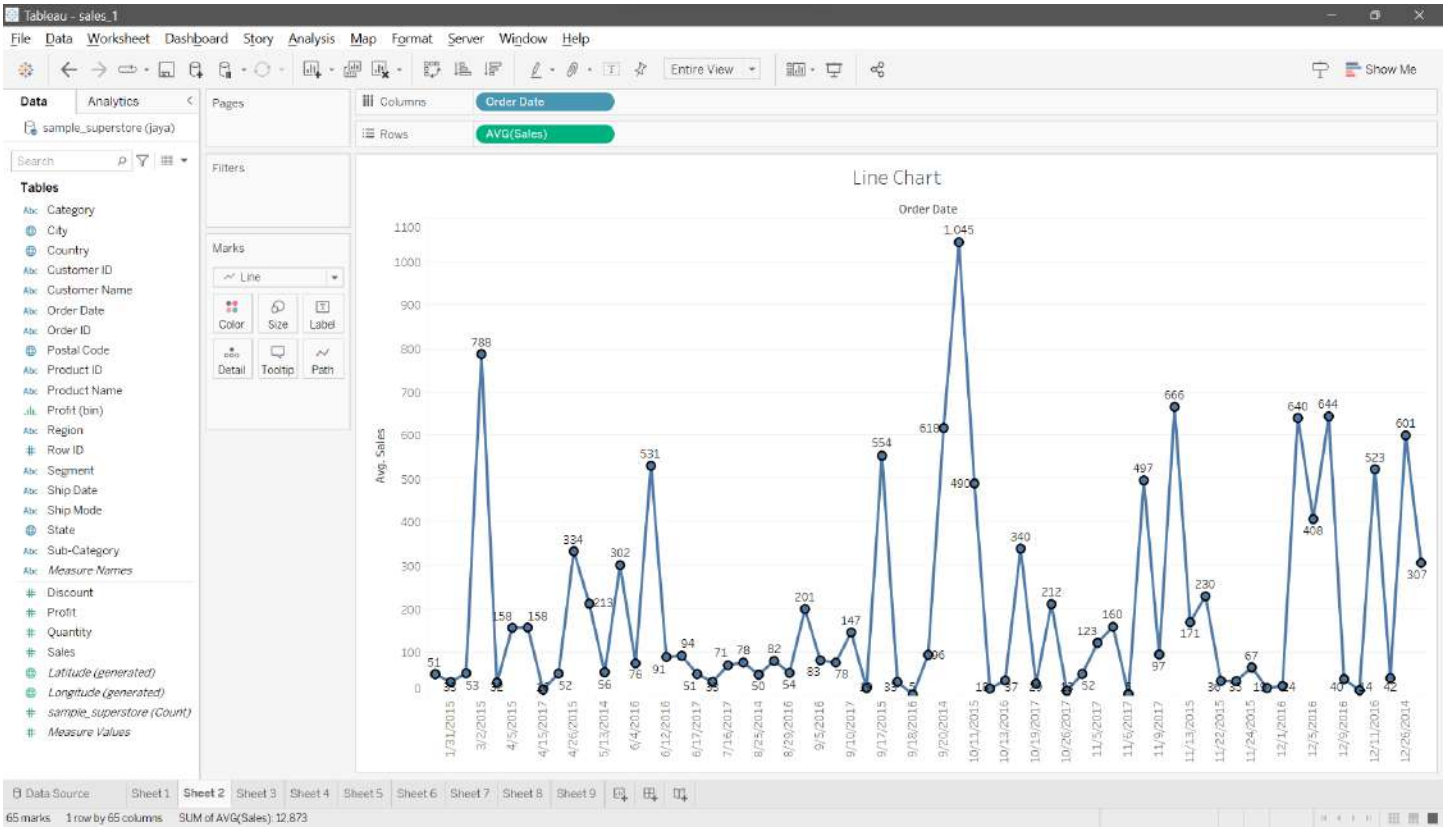
Bar Graphs in Tableau:

A bar graph in Tableau is a visual representation of data using rectangular bars. Each bar corresponds to a category or dimension, and its length represents the value or magnitude. It is an effective way to compare and analyze data across different categories or dimensions, providing a clear visual overview of patterns, trends, and comparisons within the data set.



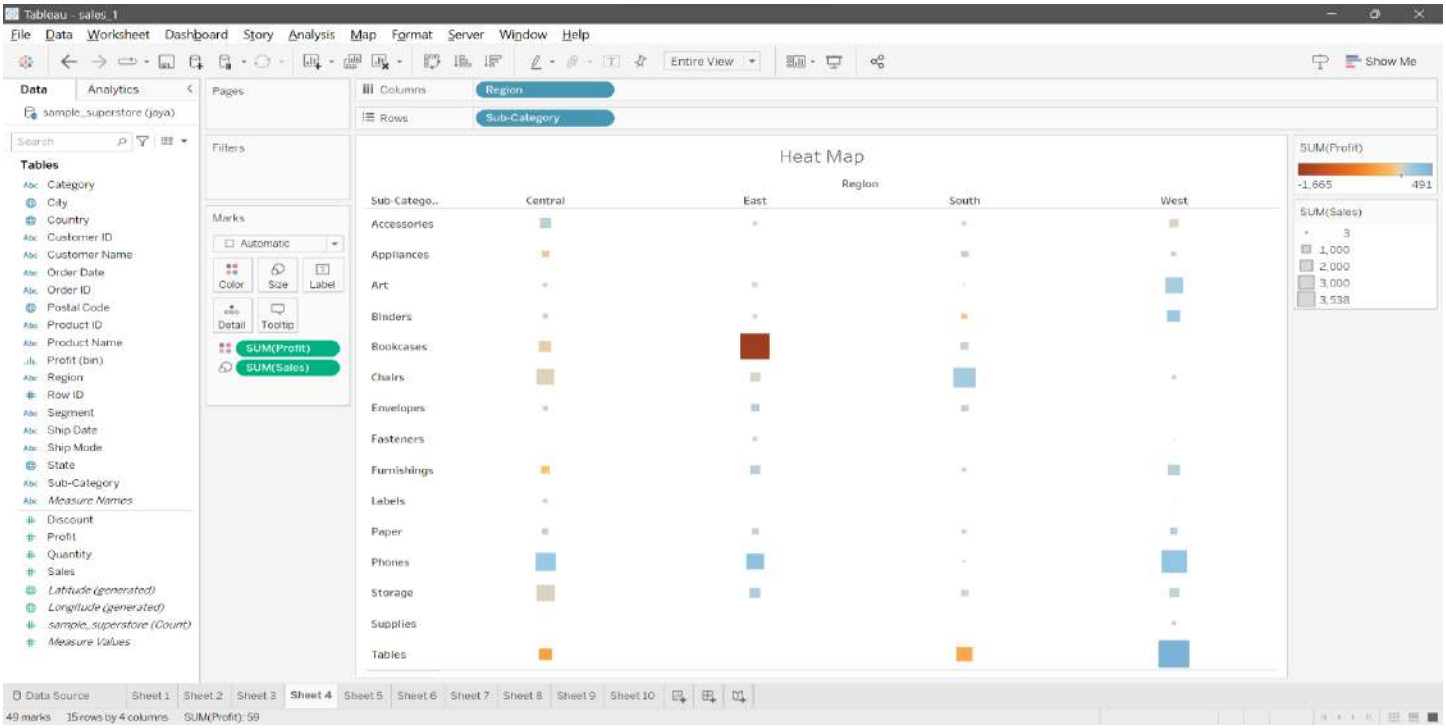
Line Chart:

Line charts are especially useful for displaying patterns, trends, and relationships in data over time. They allow for easy identification of increasing or decreasing trends, fluctuations, and seasonality. Line charts in Tableau provide a clear and concise way to communicate data trends and insights to stakeholders and aid in data-driven decision-making.

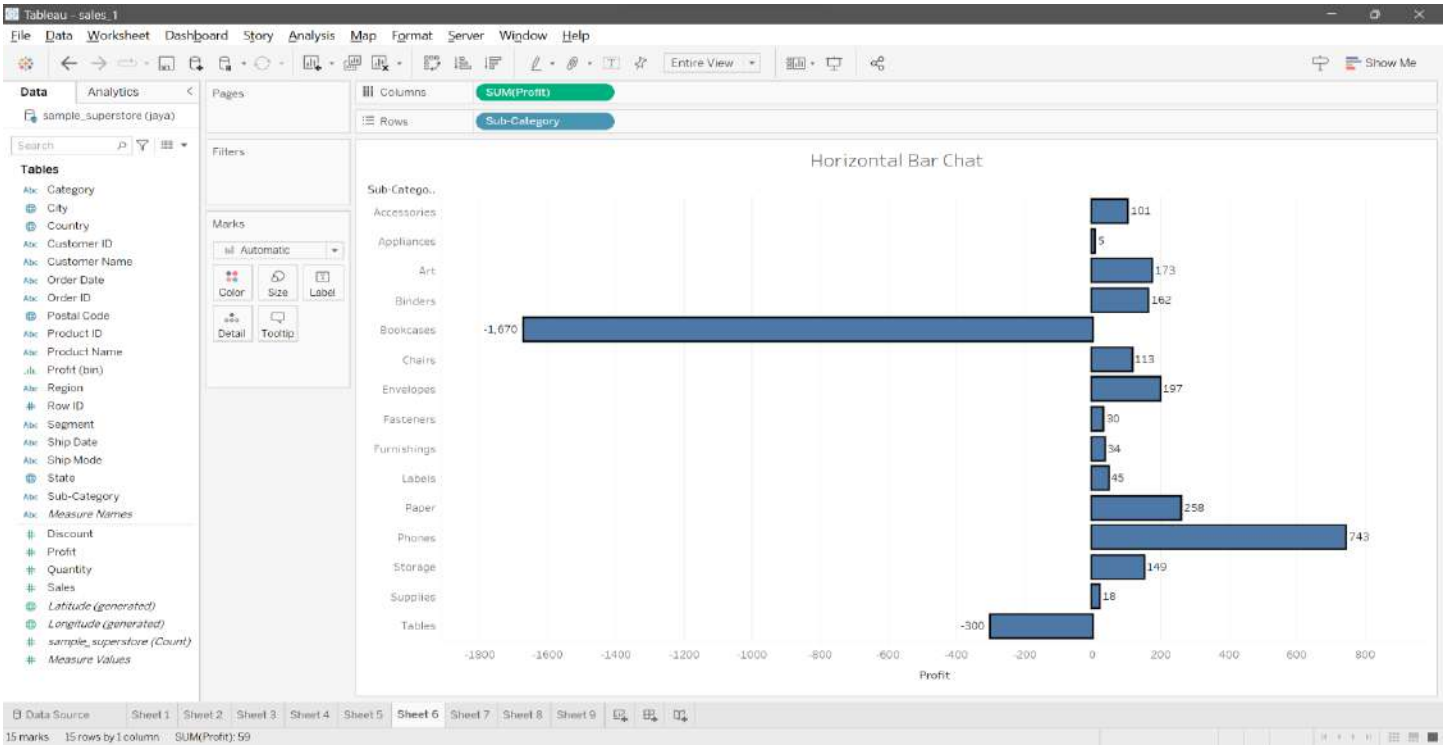


Heat Maps:

Heat maps are particularly useful for identifying areas of high or low values, clustering, and identifying trends or correlations between multiple variables. By assigning different colors or shades to represent the values, heat maps provide a visual summary of the data that allows for quick and intuitive interpretation. Tableau offers various customization options to create effective heat maps, such as adjusting color scales, adding labels, and applying interactivity for exploring different levels of detail in the data.

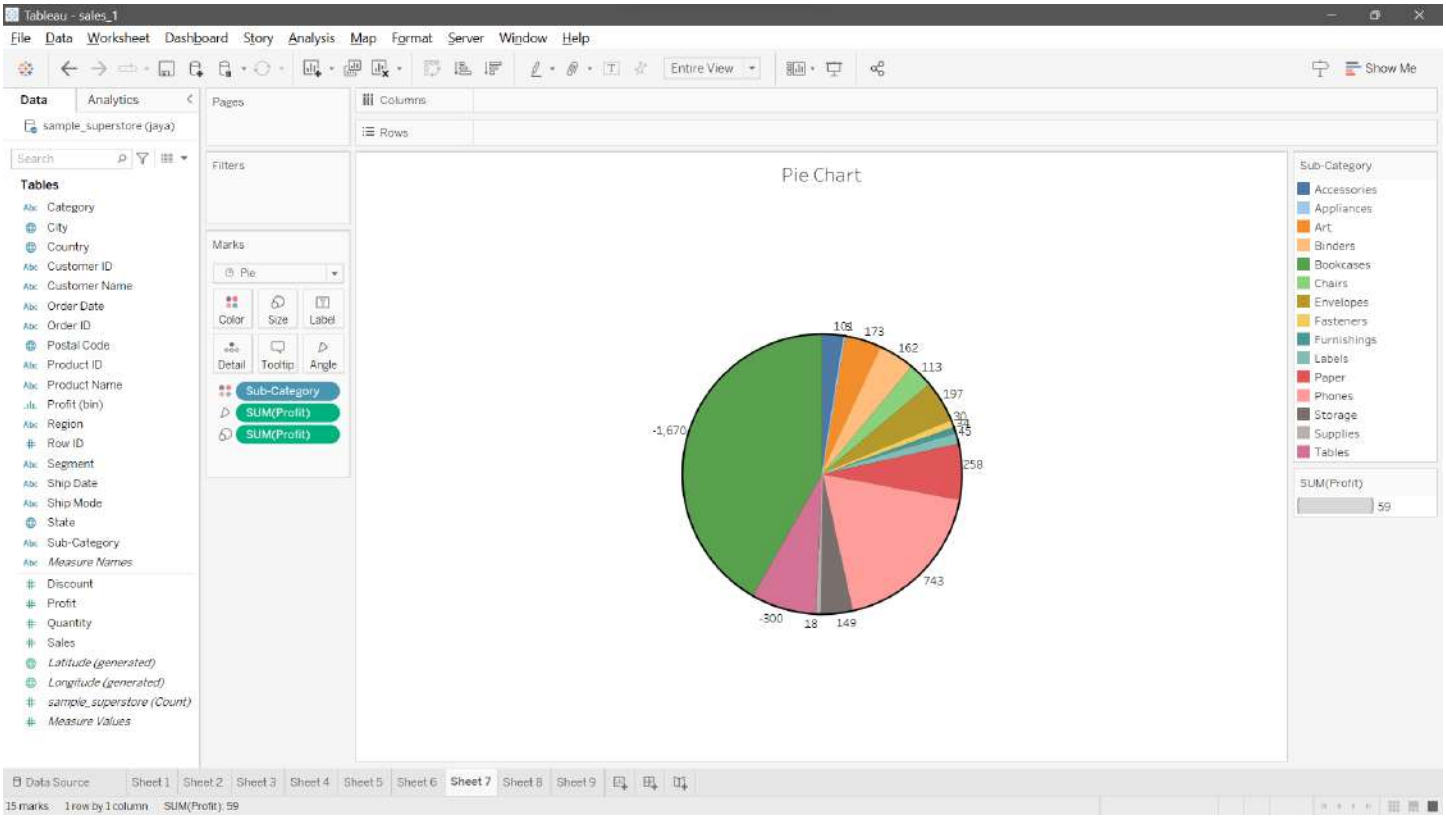


Horizontal Bar Chat:



Pie Charts:

Each segment in the pie chart represents a proportion or percentage of the whole. The size of each segment is determined by the value or magnitude of the corresponding category in the data set. Pie charts are commonly used to show the composition or distribution of categorical data and compare the relative sizes of different categories. They provide a visual representation of the proportionate relationship between different parts and can be effective in conveying a quick overview of data distribution. However, it's important to note that pie charts are not ideal for displaying precise values or comparing multiple data sets, as the angles and areas of the segments can be challenging to interpret accurately.



Tree Maps:

A tree map in Tableau is a type of visualization that displays hierarchical data using nested rectangles. It represents the relative sizes of different categories or subcategories based on their values. The size of each rectangle corresponds to the magnitude or weight of the category it represents. The tree map is divided into smaller rectangles, each representing a subcategory, and the colors or shading within the rectangles can be used to encode additional information, such as a specific metric or dimension. Tree maps are useful for visualizing the hierarchical structure of data and identifying patterns, trends, and relationships within complex datasets. They provide a compact and intuitive way to compare the sizes and proportions of different categories, enabling users to quickly identify the most significant contributors within a hierarchy. Tableau offers flexible customization options for tree maps, allowing users to adjust color schemes, labels, and interaction to enhance the visual exploration of data.