Assignment 1

work on tableau

1. Open Tableau Desktop.
2. Click Connect → To a File → Microsoft Excel / Text File (or choose your data source).
3. Select your dataset file and click Open.
4. Drag the sheet to the Data Source area and click Sheet 1 to start visualization.

Create a Visualization

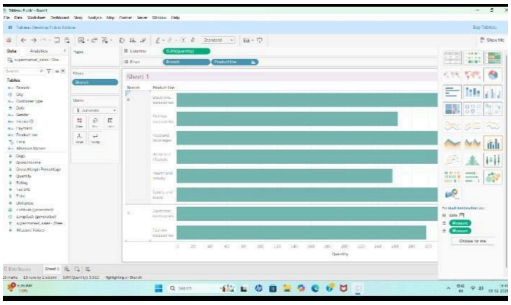
1. Drag a Dimension (like Category or Date) to the *Rows* or Columns shelf.
2. Drag a Measure (like Sales or Quantity) to the opposite shelf.
3. Tableau automatically creates a chart (Bar/Line, etc.).
4. Use the Marks card to change chart type, add Color, Label, or Size.

Bar chart

1. Drag Category and Sub-Category to the Rows shelf.
2. Drag Quantity to the Columns shelf to create a horizontal bar chart.
3. Make sure the Marks type is set to Bar.
4. Click Color in the Marks card to change the bar colors.

Purpose

This creates a horizontal bar chart to compare Quantity across different Categories and Sub-Categories.The purpose is to easily analyze which category or sub-category has higher or lower sales quantity and identify performance differences visually.

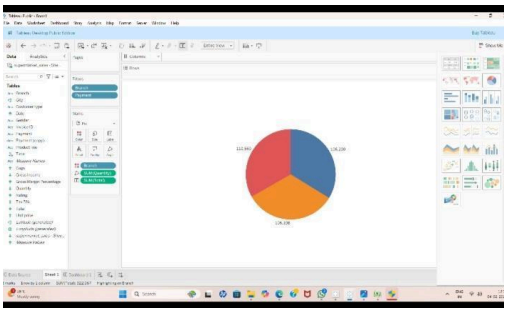


Pie chart

1. Drag Quantity to the Rows shelf and change the Marks type to Pie.
2. Drag Branch (or Category) to the Color option in the Marks card.
3. Drag Quantity again to Label to show values on the pie chart.
4. Adjust the Size slider to make the pie chart bigger.

Purpose

This creates a Pie Chart to show the proportion of Quantity by Branch or Category.The purpose is to easily understand the percentage contribution of each segment and compare their share visually in a single view.



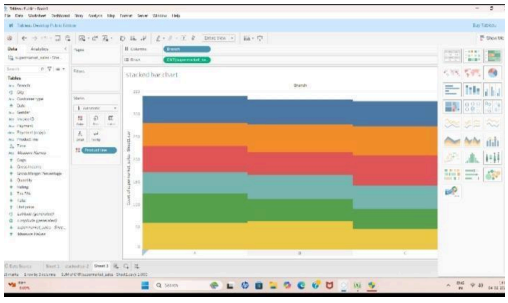
Stacked bar chart

1. Drag Branch to the Columns shelf.
2. Drag CNT(Customer ID) (or any measure) to the Rows shelf.
3. Drag Product Line (or Category) to the Color option in the Marks card.
4. Make sure the Marks type is set to Bar to create the stacked bar chart.

Purpose

This creates a stacked bar chart to compare the total count of customers across different Branches.

The purpose is to analyze how each Product Line (or Category) contributes to the total in every branch and easily compare distribution patterns.

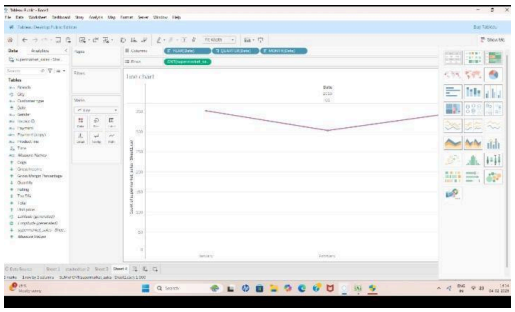


Line chart

1. Drag Date to the Columns shelf and set it to Month or Continuous date.
2. Drag Sales (or any measure like Quantity) to the Rows shelf.
3. In the Marks card, select Line as the chart type.
4. (Optional) Drag the same measure to be able to show values on the line chart.

Purpose

This creates a line chart to display Sales (or Quantity) trends over time by Month.The purpose is to analyze patterns, identify growth or decline, and track performance changes across different time periods.

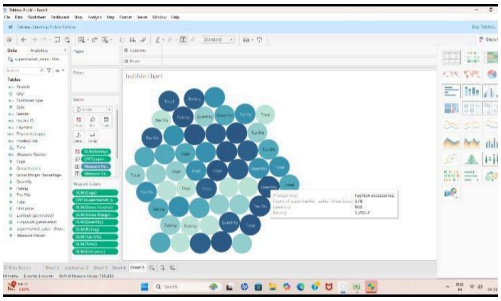


Bubble chart

1. Change the Marks type to Circle (or Packed Bubbles if available).
2. Drag a Dimension (like Product Line or Category) to Detail.
3. Drag a Measure (like Sales or Quantity) to Size.
4. Drag the same or another measure to Color and Label to complete the bubble chart.

Purpose

This creates a bubble chart (Packed Bubbles) to represent categories with different sizes based on Sales or Quantity.The purpose is to quickly compare the magnitude of each category and visually identify which items contribute more or less to overall performance.



Assignment 2

work on tableau

1. Open Tableau Desktop.
2. Click Connect → To a File → Microsoft Excel / Text File (or choose your data source).
3. Select your dataset file and click Open.
4. Drag the sheet to the Data Source area and click Sheet 1 to start visualization.

Create a Visualization

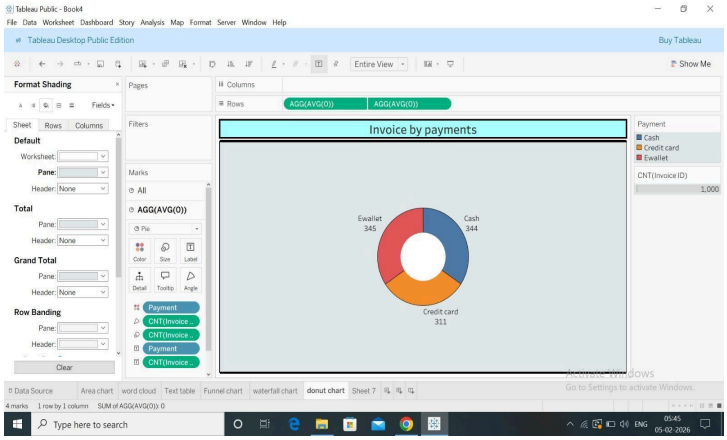
1. Drag a Dimension (like Category or Date) to the Rows or Columns shelf.
2. Drag a Measure (like Sales or Quantity) to the opposite shelf.
3. Tableau automatically creates a chart (Bar/Line, etc.).
4. Use the Marks card to change chart type, add Color, Label, or Size.

Donut chart

1.Payment→drag to Color (Marks card).
2.Invoice ID→ drag to Angle and Label, change to CNT (Count).
3. Change Marks type → Pie, then create Dual Axis using AVG(0) for donut shape.
4.Reduce Size of inner pie to create the Donut Chart and format colors/labels.

Purpose

To show the distribution of invoices by payment type(Cash, Credit Card, E-wallet).To compare how many invoices come from each payment method.To understand which payment type is used most by customers.To present the data clearly in a visual format for easy analysis

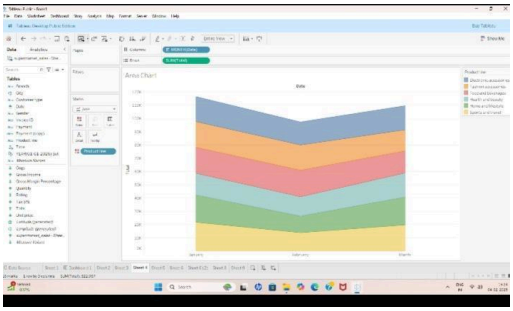


Area chart

1. Drag Date to the Columns shelf (set it to Month or Continuous).
2. Drag Sales (or any measure) to the Rows shelf.
3. Change the Marks type to Area.
4. Drag Product Line (or Category) to Color to create the stacked area chart.

Purpose

This creates a stacked area chart to show how Sales change over time by Month.
The purpose is to analyze overall trends and understand how each Product Line or Category contributes to total sales across different time periods.

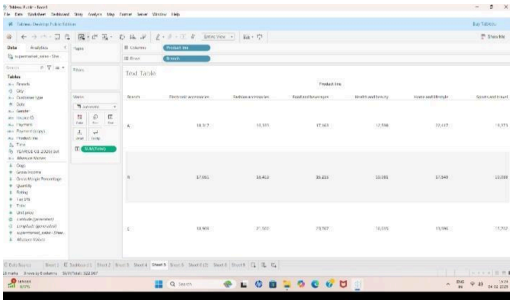


Text chart

1. Drag Branch to the Rows shelf.
2. Drag Product Line to the Columns shelf.
3. Drag Total (or any measure) to the Text option in the Marks card.
4. Make sure the Marks type is set to Text to create the text table.

Purpose

This creates a text table (crosstab) to display exact Total values for each Branch and Product Line combination.
The purpose is to compare detailed numeric data clearly and accurately without using graphical charts.

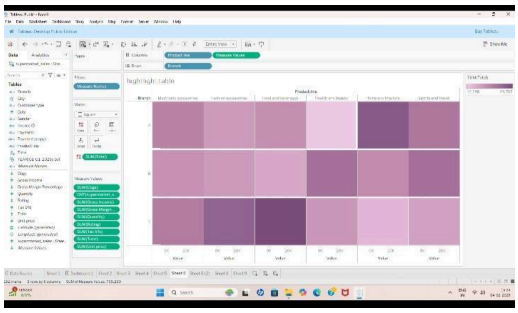


Highlight table

1. Drag Branch to the Rows shelf and Product Line to the Columns shelf.
2. Drag Total (or any measure) to the Color and Text in the Marks card.
3. Change the Marks type to Square.
4. Adjust the color palette from Color → Edit Colors to complete the highlight table.

Purpose

This creates a highlight table to display Total values with color intensity for each Branch and Product Line.The purpose is to quickly identify high and low values using color variation, making comparisons easier and more visually impactful than a simple text table.



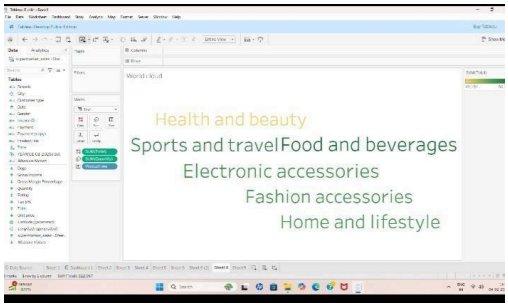
Word cloud

1. Change the Marks type to Text.
2. Drag Product Line (or Category) to the Text option in the Marks card.
3. Drag Total (or any measure) to Size and Color.
4. Adjust the Size slider to create the Word Cloud effect.

Purpose

This creates a word cloud where the size and color of each Product Line represent its Total value.

The purpose is to quickly highlight the most important or highest-performing categories in a visually attractive and easy-to-understand format.



Waterfall Chart

1.Connect the dataset
Open Tableau → Click **Connect to Data** → Load your dataset.
2.Drag the fields
Drag Product line to Columns.
Drag Total (Sales)to Rows.
3.Change the chart type
In the Marks card, change Automatic to Gantt Bar.
4.Create Running Total
Right-click SUM(Total)→ Select Quick Table Calculation→ Choose Running Total.
5.Adjust the size
Use the Size option in the Marks card to adjust the bar width.

Purpose

A Waterfall chart is used to show how individual values contribute to a final total.It helps visualize the increase or decrease in sales across product lines.
The chart clearly displays the step-by-step change from the starting value to the grand total.It is useful for analyzing business performance and understanding contributions of each category.