

QUESTION

1:- Explain in detail the area graphs and line graphs in tableau and how to create them with examples. (With the help of an example create one in tableau?)

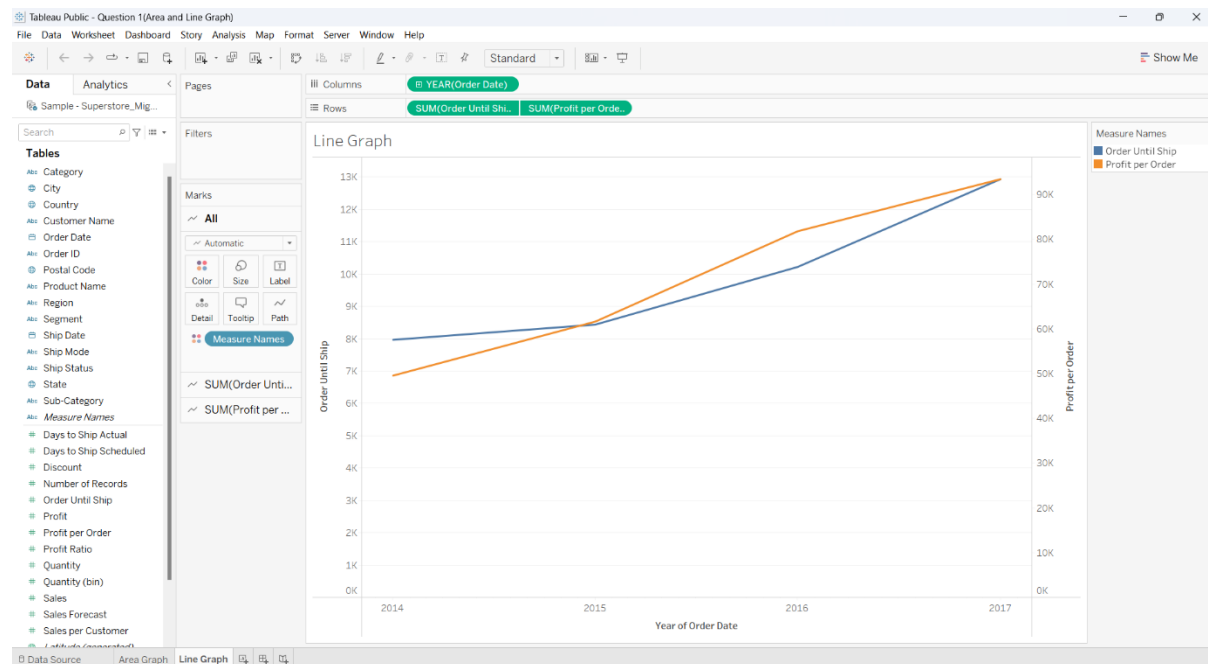
ANSWER

Area Graphs :- Area graphs are a type of chart that illustrate how larger and smaller values compare to each other over a period of time, by displaying them as areas shaded on a graph. Area graphs are commonly used to show trends in a dataset over time.

To create an area graph in Tableau, start by dragging a measure to the Columns shelf. Then drag a dimension to the Rows shelf. Next, select Show Me from the top right corner of the Tableau window and choose Area from the drop-down menu.

Line Graphs :- Line graphs are a type of chart that display data as a series of points connected by straight lines. Line graphs are commonly used to show trends in a dataset over time.

To create a line graph in Tableau, start by dragging a measure to the Columns shelf. Then drag a dimension to the Rows shelf. Next, select Show Me from the top right corner of the Tableau window and choose Line from the drop-down menu.



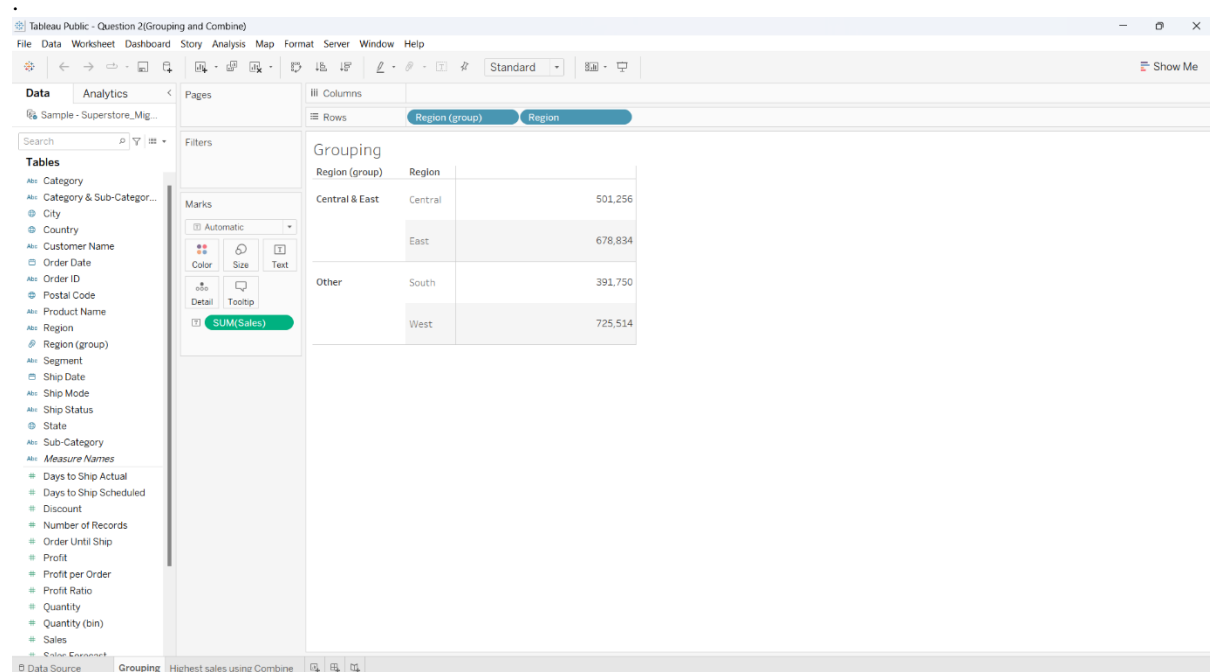
2 :- What are the different steps in grouping fields and combining tables in tableau ? Explain with examples. (With the help of an example create one in tableau)?

ANSWER

1. Create a Primary Table: The first step in grouping fields and combining tables is to create a primary table. This table should contain all of the fields that you want to use in your analysis.
2. Group Fields: Once you have your primary table, you can group fields together. This is done by selecting the fields that you want to group and then right-clicking and selecting “Group” from the context menu.
3. Combine Tables: Once you have grouped fields together, you can combine tables. This is done by selecting the tables you want to combine and then right-clicking and selecting “Join” from the context menu.
4. Create a Custom View: You can create a custom view in Tableau by dragging and dropping fields into the view. For example, you can create a custom view of the Sample Superstore to analyze the sales performance of each region.

Example:

Let's say we want to group the fields “Product Category”, “Sub-Category”, and “Product Name” together in order to analyze sales performance of each product. To do this, we first need to select the fields and drag them into the same group. We can do this by selecting the fields in the data pane and dragging them into the same group in the view. Once the fields are grouped together, we can then analyze the sales performance of each product by using the “Sales” and “Profit”



3 :- What is the use of color and size options in the marks card of tableau ? (With the help of an example create one in tableau) ?

ANSWER

Color

Using color in Tableau can be a powerful way to highlight different categories or patterns in your data. By assigning different colors to different values in your data, you can create a more visually appealing and informative visualization. Color can also help to make your visualization more accessible for colorblind viewers.

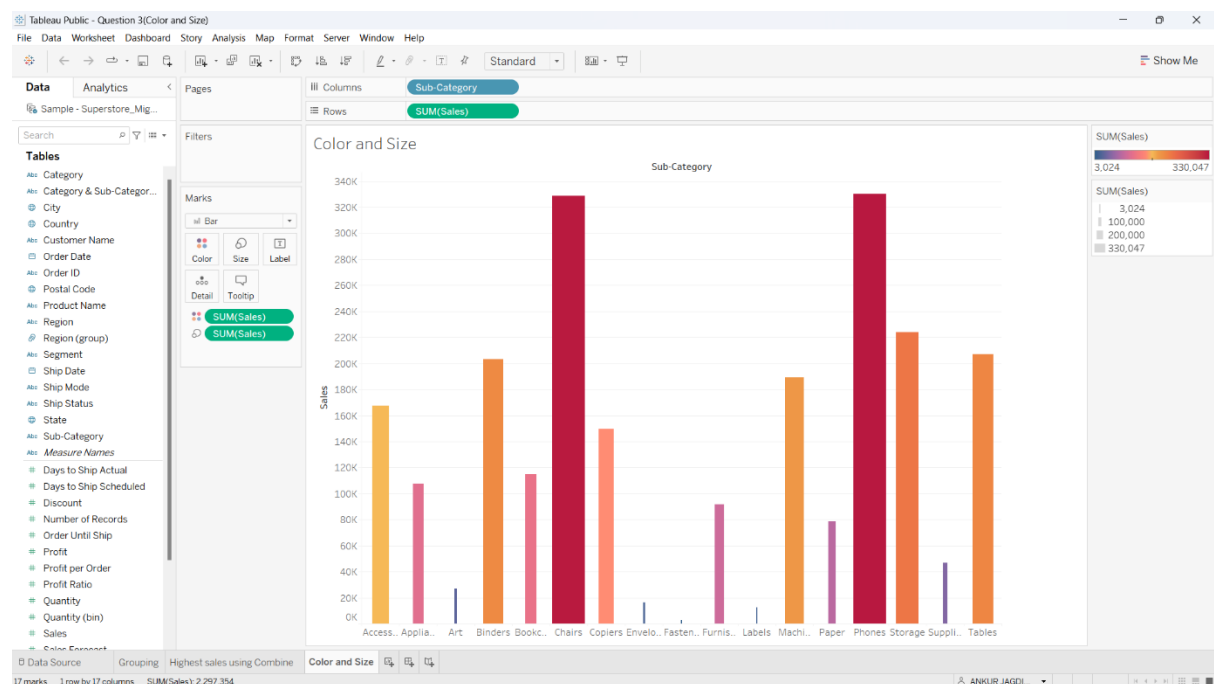
Tableau Color Example

In this example, we've created a map that shows the total sales for each region in the Sample Superstore dataset. We've used color to highlight the highest and lowest sales regions, with darker shades of blue indicating higher sales and lighter shades indicating lower sales.

Size

Using size in Tableau can be another way to encode data in your visualization. By assigning different sizes to your marks based on a measure, you can highlight the importance or significance of different data points. For example, you could use size to show the total profit for each product in a scatterplot or to show the number of customers in each region in a bubble chart.

In Tableau, you can assign size to your marks by using a measure or by using the Size shelf. You can also adjust the size range and scale to make sure your visualization is clear and informative.

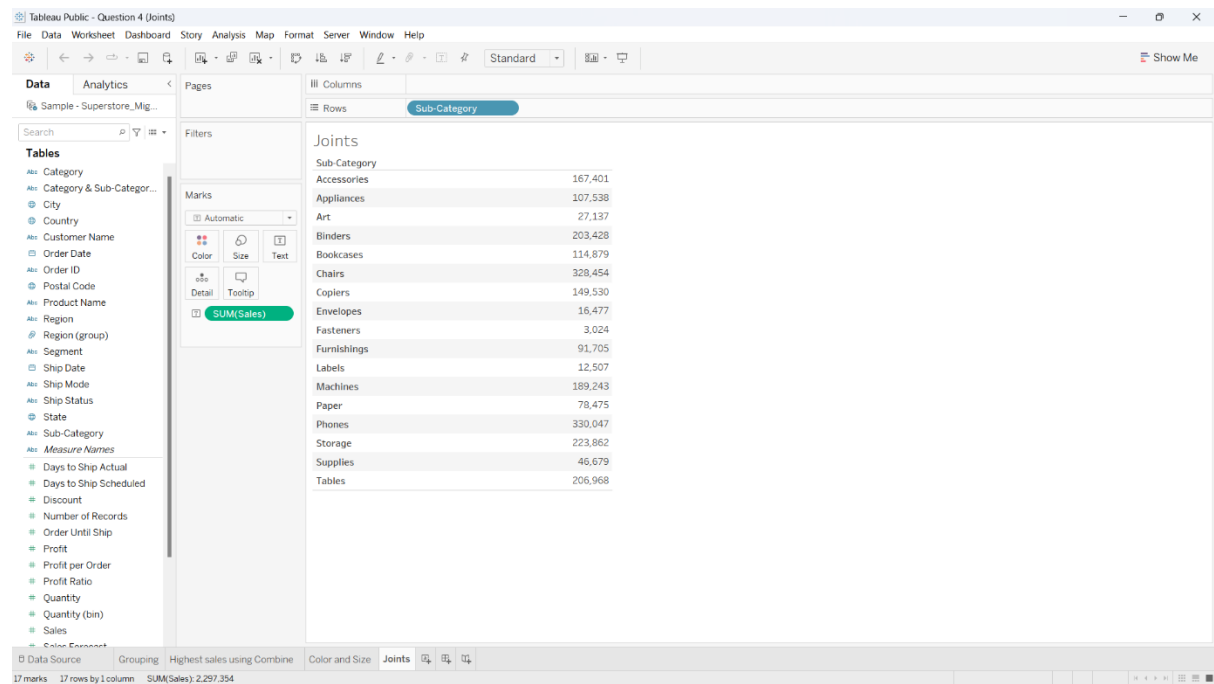


4 :- What are the different joins supported by tableau? (With the help of an example create one in tableau)?

ANSWER

Tableau supports the following types of joins:

1. Inner Join: This join returns only the records that have matching values in both the tables
2. Left Join: This join returns all the records from the left table and only those records from the right table which have matching values in the common field.
3. Right Join: This join returns all the records from the right table and only those records from the left table which have matching values in the common field.
4. Full Join: This join returns all the records from both the tables, regardless of whether the other table has a matching record or not.



5- Explain the steps to create dashboard in tableau with example (With the help of an example create one in tableau)?

ANSWER

Step 1: Launch Tableau Desktop

To begin, launch Tableau Desktop. This will open the Tableau Interface.

Step 2: Connect to a Data Source

Next, connect to the data source you would like to visualize. To do this, go to the “Connect” tab in the left-hand menu and select the type of data source you want to connect to.

Step 3: Prepare and Cleanse Data

Once the data is connected, you can begin preparing your data. This may include making calculations, performing data cleansing, and organizing your data.

Step 4: Create Visualizations

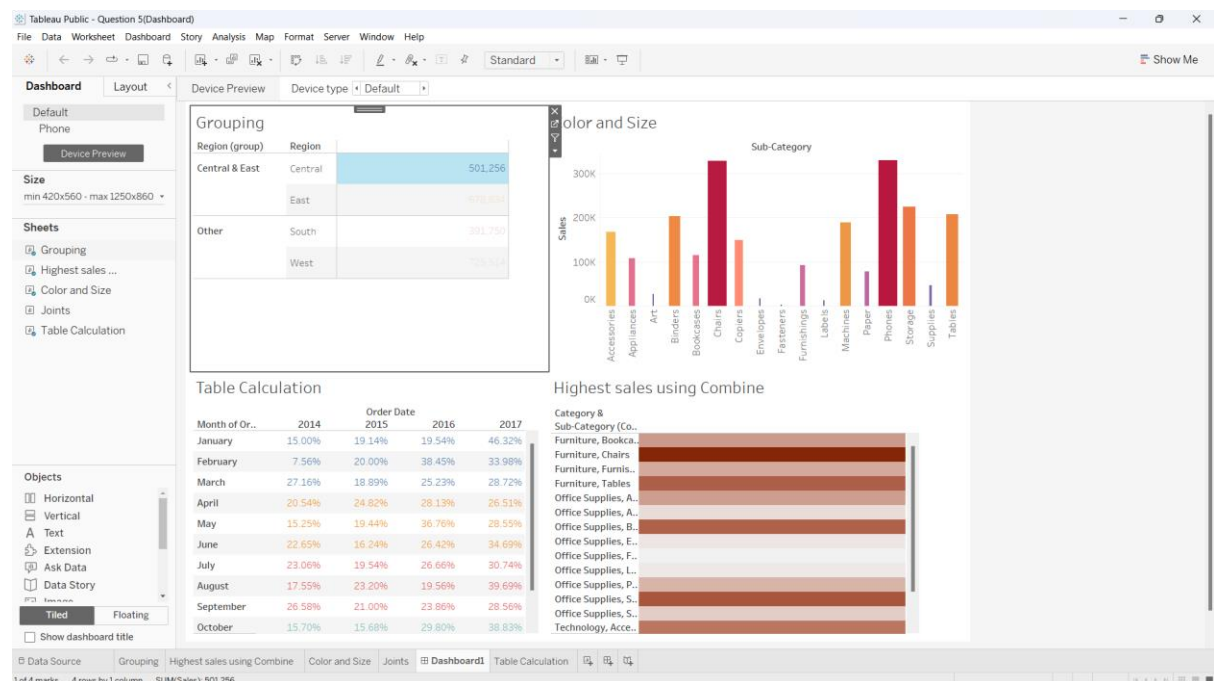
Now, you can create visualizations for your dashboard. To do this, select the visualization type you would like to use from the list of options. You can also customize your visualizations using the formatting options available.

Step 5: Assemble Your Dashboard

Once you have created your visualizations, you can assemble them into a dashboard. To do this, drag each visualization onto the dashboard canvas. You can arrange the visualizations as desired, and add titles, legends, and other elements.

Step 6: Publish Your Dashboard

When your dashboard is complete, you can publish



6 :- Explain in detail the heat maps and scatter plot and how to create them with example (With the help of an example create one in tableau)?

ANSWER

Example in Tableau:

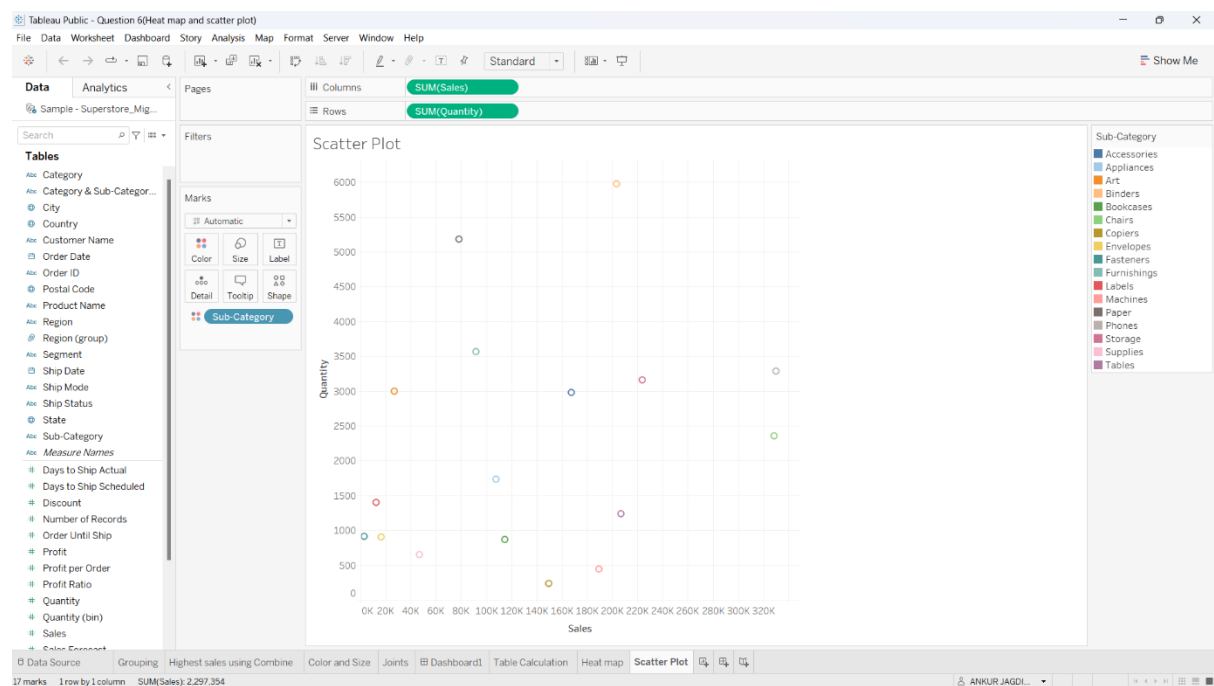
In this example, we will create a heat map and a scatter plot in Tableau.

Heat Map:

1. In Tableau, select the "Sheet" tab and select the "Add" button.
2. From the drop-down menu, select "Heat Map".
3. Select the data set you'd like to use for the heat map.
4. Select the columns you wish to use for the x-axis and y-axis of the heat map.
5. Select the column you'd like to use for the color of the heat map.
6. Click "Apply" to create the heat map.

Scatter Plot:

1. In Tableau, select the "Sheet" tab and select the "Add" button.
2. From the drop-down menu, select "Scatter Plot".
3. Select the data set you'd like to use for the scatter plot.
4. Select the columns you wish to use for the x-axis and y-axis of the scatter plot.
5. Select the column you'd like to use for the color of the scatter plot.
6. Click "Apply" to create the scatter plot.



7 :- How to create table calculations in tableau with examples . (With the help of an example create one in tableau)

ANSWER

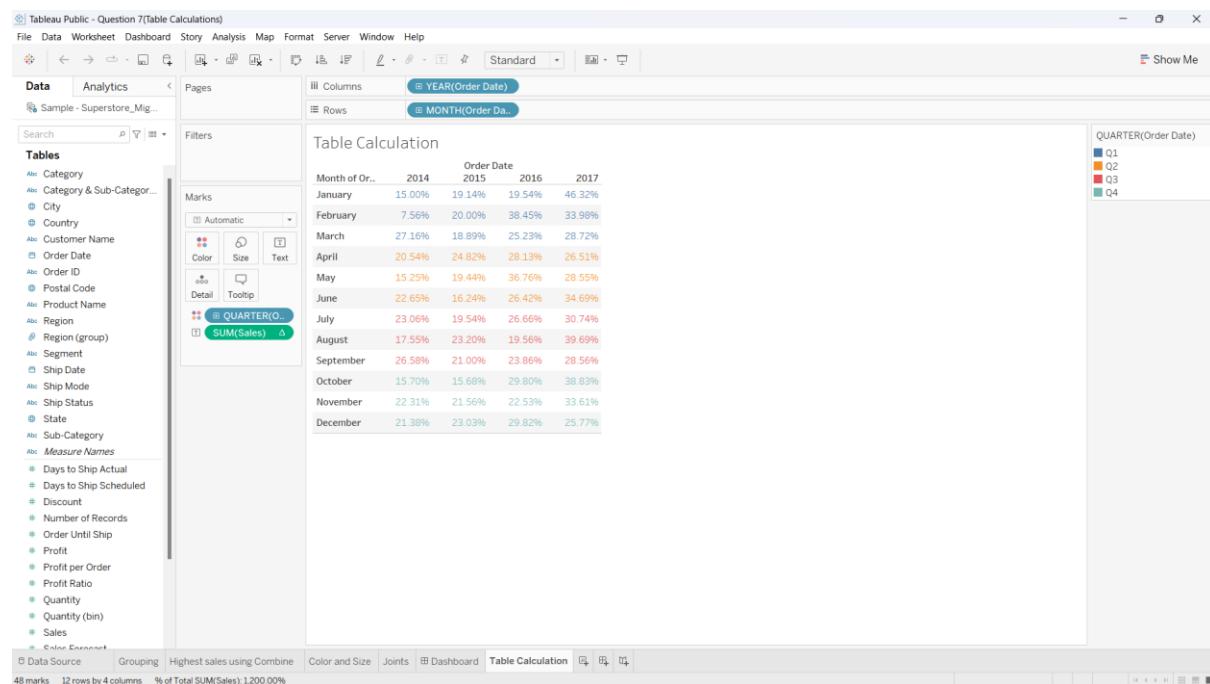
Table calculations are calculations that are applied to the values in the view, after the data has been aggregated. Table calculations are calculated across the entire table, not just within a partition.

To create a table calculation, you first need to add the relevant measure to the view. To create a table calculation in Tableau, follow the steps below.

- 1) Create a view with the measure and dimensions you want to analyze.
- 2) Right click on the measure field and select “Quick Table Calculation” from the menu.
- 3) Select the type of calculation you would like to perform from the list of available table calculations.

For example, to calculate the running total of a measure, select “Running Total” from the list.

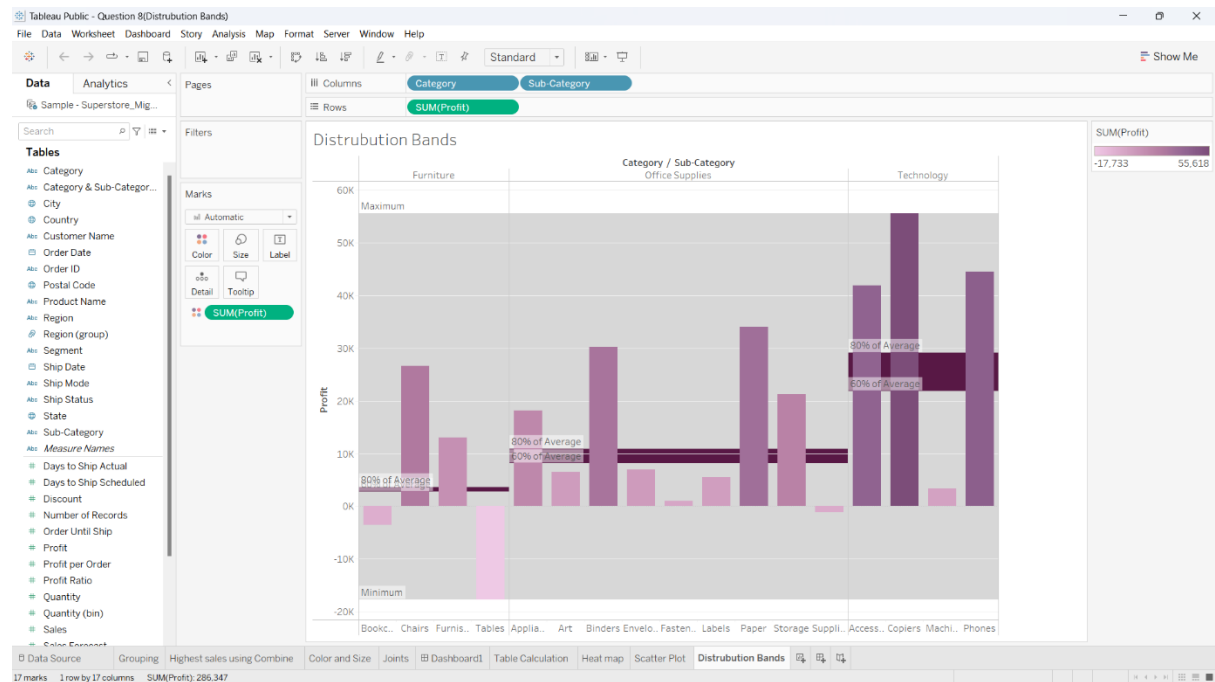
- 4) Select the field you would like to calculate the table calculation on.
- 5) Select the “Compute Using” field and select either “Table (across)” or “Table (down)” depending on the direction you want the calculation to go.
- 6) Click “OK” and the table calculation will be applied to the view.



8 :- Explain in detail the distribution bands in tableau and how to create them with example (With the help of an example create one in tableau)

ANSWER

Distribution bands in Tableau are used to identify abnormal data points in a visualization. They are created by plotting a standard deviation or percentile line on a chart. This line will show where data points are located above or below the average.



9:- Explain the steps to create bar chart and pie diagram in tableau with example (With the help of an example create one in tableau)

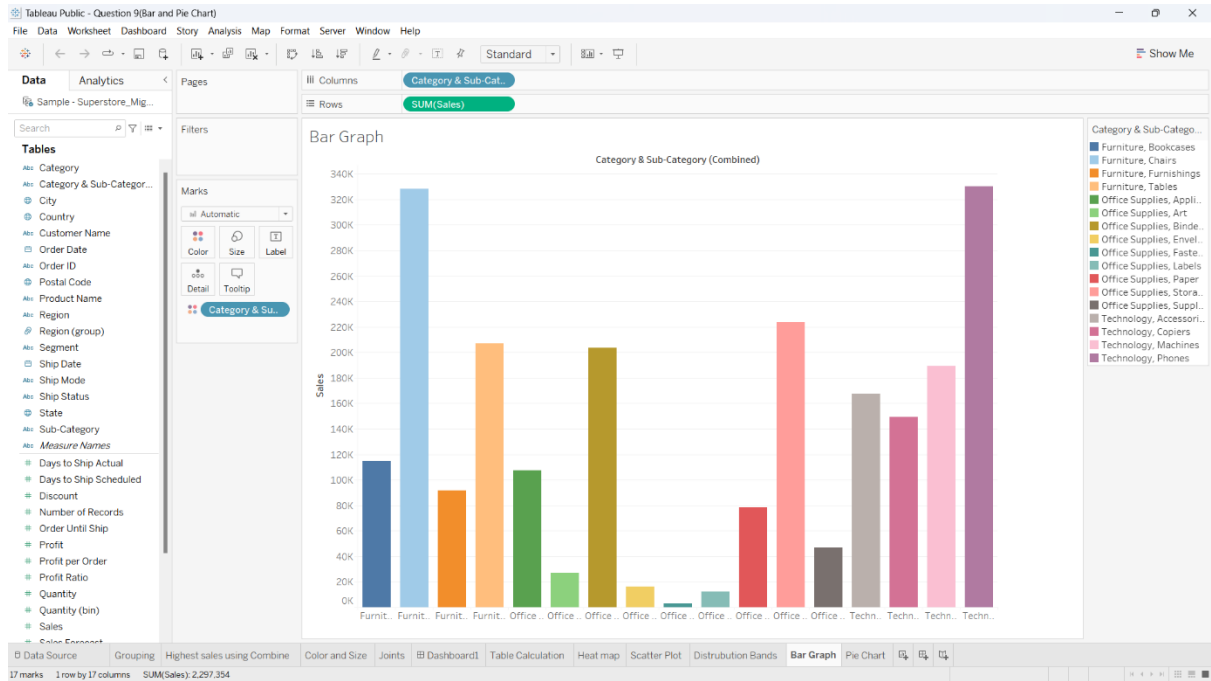
ANSWER

Creating a Bar Chart in Tableau

1. Launch Tableau and connect to a data source.
2. Drag a dimension to the Columns shelf and a measure to the Rows shelf.
3. Select the Show Me tab at the top of the screen.
4. Select the Bar chart icon from the Show Me tab.
5. Your bar chart will appear.
6. To format your chart, select the Marks card and choose the type of mark you would like to use
7. To adjust the chart's title, select the Title card and type the title you would like to use.
8. To edit the axes, select the Axes card and adjust the scale and label settings.
9. To adjust the colors of the bars, select the Color card and choose the color palette you would like to use.

Creating a Pie Chart in Tableau

1. Launch Tableau and connect to a data source.
2. Drag a dimension to the Columns shelf and a measure to the Rows shelf.
3. Select the Show Me tab at the top of the screen.
4. Select the Pie chart icon from the Show Me tab.
5. Your pie chart will appear.
6. To format your chart, select the Marks card and choose the type of mark you would like to use.
7. To adjust the chart's title, select the Title card and type the title you would like to use.
8. To adjust the colors of the sections, select the Color card and choose the color palette you would like to use.
9. To adjust the angle of the sections, select the Angle card and select the angle you would like to use.



10 :- How to add story points on the dashboard (With the help of an example create one in tableau)

ANSWER

Step 1: Open Tableau software and connect to a data source.

Step 2: Drag and drop the Story Points field from the data source to the Rows shelf.

Step 3: Drag and drop the Task Name field from the data source to the Columns shelf.

Step 4: Right click on the Story Points field in the Rows shelf and select Measure > Count.

Step 5: Right click on the Task Name field in the Columns shelf and select Measure > Average.

Step 6: To add a chart to the dashboard, select a chart type from the Show Me drop-down list.

Step 7: To create a customized chart, select the chart type from the drop-down list, then customize the chart by selecting the chart type, number of series, and labels.

Step 8: Drag and drop the chart to the dashboard canvas.

Step 9: To add additional charts and/or dashboard elements, repeat steps 2-7.

Step 10: To save the dashboard, click File > Save As.

