## ix. Explain the steps to create bar chart and pie diagram in tableau with example.

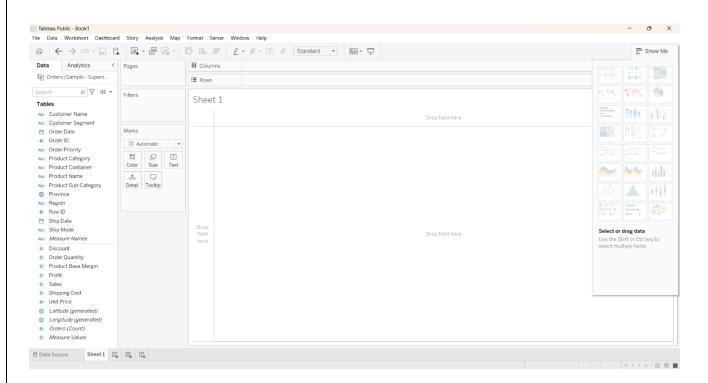
**Bar chart-** A bar chart or bar graph is a chart or graph that presents categorical data with rectangular bars with heights or lengths proportional to the values that they represent. The bars can be plotted vertically or horizontally. A vertical bar chart is sometimes called a column chart.

Bar charts are to compare data across categories. we create a bar chart by placing a dimension on the Rows shelf and a measure on the Columns shelf, or vice versa.

A bar chart uses the Bar mark type. Tableau selects this mark type when the data view matches one of the two field arrangements

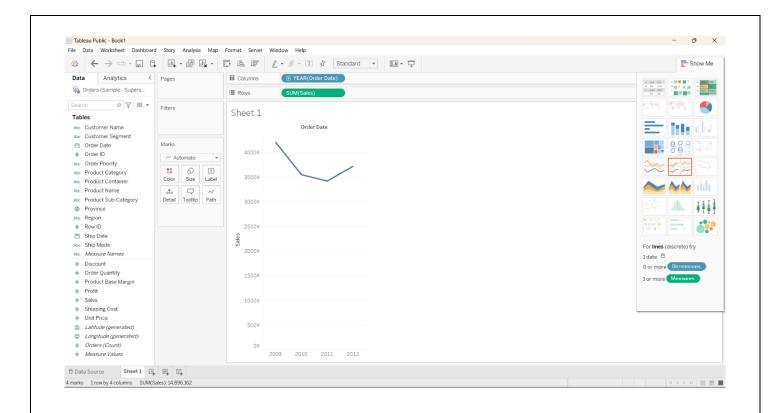
Below are the following steps to create bar charts in Tableau

Step 1- Connect to the data source.

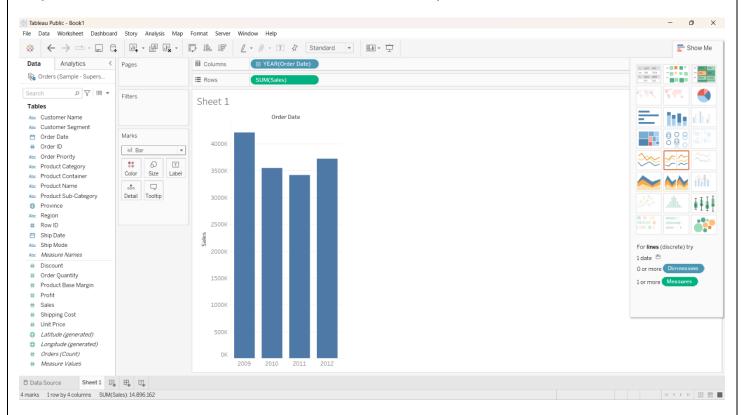


Step 2- Drag the Order Date dimension to Columns and drag the Sales measure to Rows.

Notice that the data is aggregated by year and column headers appear. The Sales measure is aggregated as a sum and an axis is created, while the column headers move to the bottom of the view. Tableau uses Line as the mark type because we added the date dimension.



## Step 3 - On the Marks card, select Bar from the drop-down list.



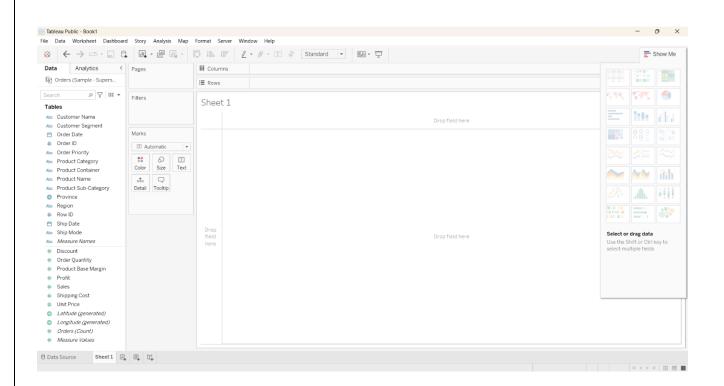
Further we can add colour also label as we desire

**Pie Diagram -** A pie chart is a type of graph that represents the data in the circular graph. The slices of pie show the relative size of the data, and it is a type of pictorial representation of data. A pie chart requires a list of categorical variables and numerical variables. Here, the term "pie" represents the whole, and the "slices" represent the parts of the whole.

The "pie chart" is also known as a "circle chart", dividing the circular statistical graphic into sectors or sections to illustrate the numerical problems. Each sector denotes a proportionate part of the whole. To find out the composition of something, Pie-chart works the best at that time. In most cases, pie charts replace other graphs like the bar graph, line plots, histograms, etc.

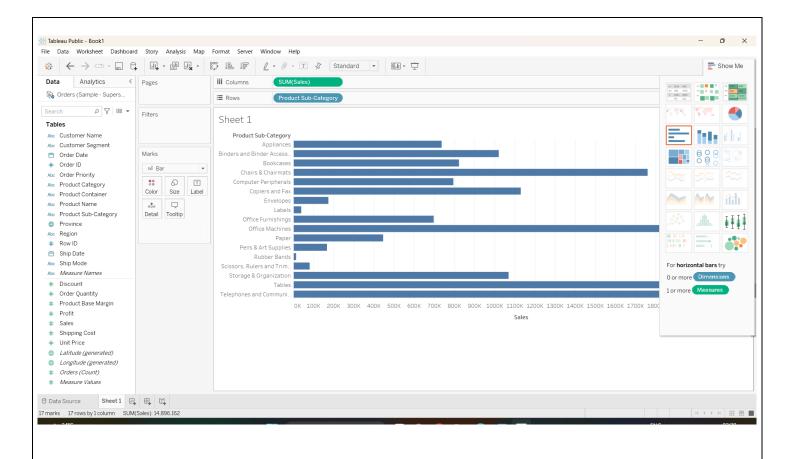
Below are the following steps to create bar charts in Tableau

Step 1- Connect to the data source.

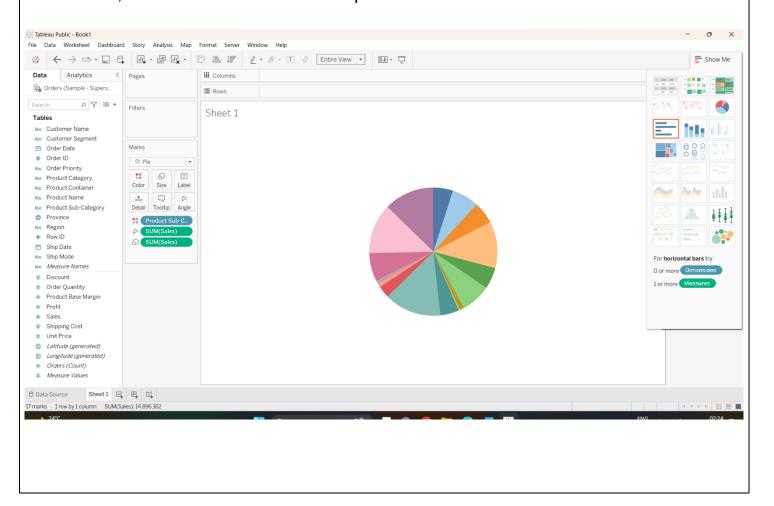


Step 2- Drag the Sales measure to Columns and drag the Sub-Category dimension to Rows.

Tableau aggregates the Sales measure as a sum. By default, Tableau displays a bar chart.



Step 3- Click Show Me on the toolbar, then select the pie chart type. Pie charts require at least one or more dimensions and one or two measures. Aggregate fields, such as Profit Ratio, don't contribute to those requirements.



Further we can Add labels by dragging the Sub-Category dimension from the Data pane to Label on the Marks card.

