Lesson 04 Demo 05
Parameters with Dimensions

Objective: To demonstrate parameter setup and dynamic chart linking in Tableau for interactive data visualization

Tools required: Tableau Desktop

Prerequisites: None

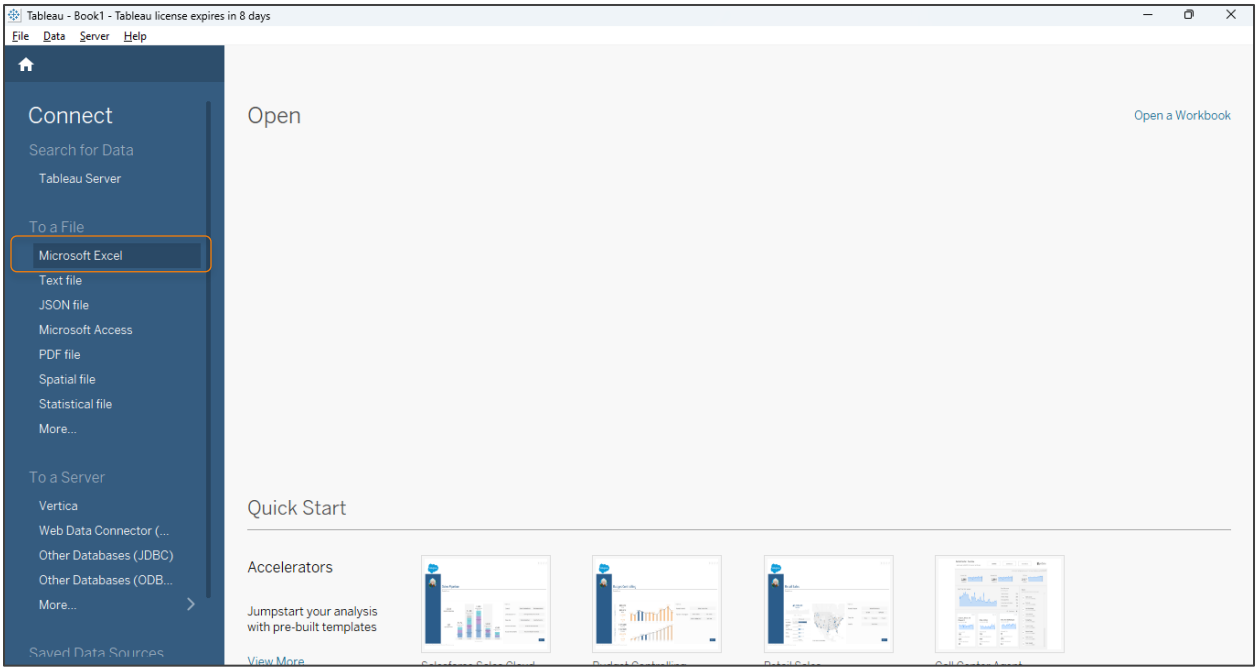
Note: Download the Sample - Superstore-2017-2020.xlsx dataset from the Reference Material section of the LMS

Steps to be followed:

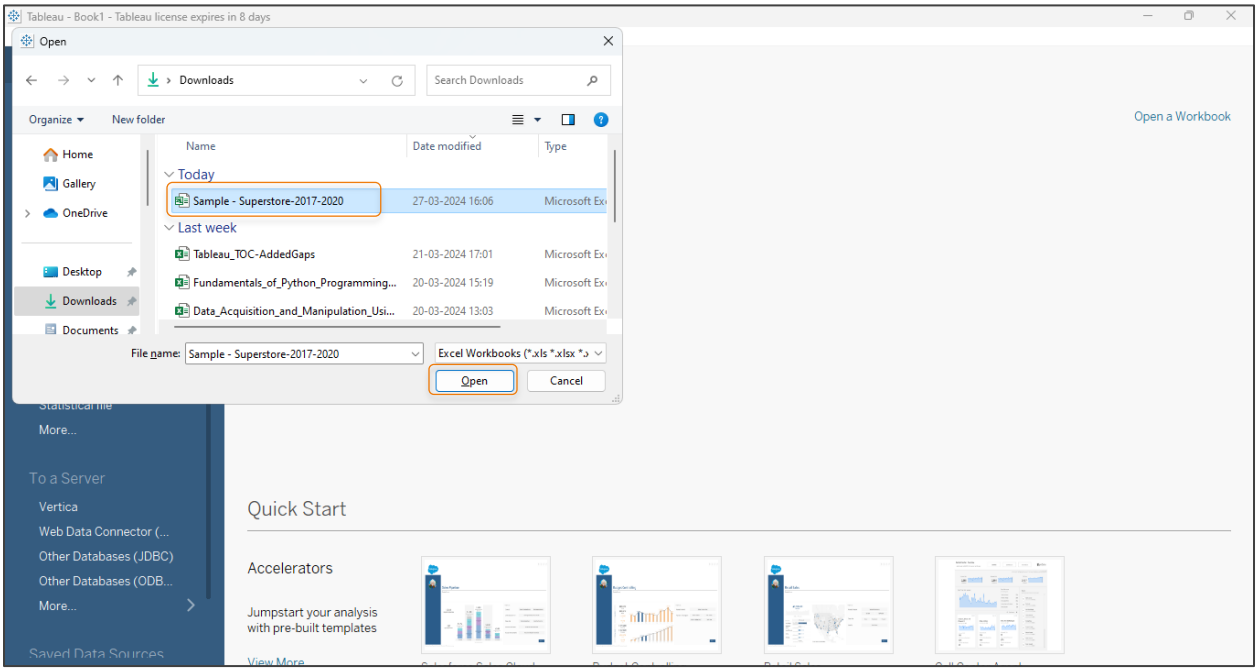
1. Import the Excel file
2. Drag Sales to Rows
3. Open the Parameter window and create a Parameter
4. Show Parameter control and move it below the Marks card
5. Create a calculation to connect the Parameter with the chart

Step 1: Import the Excel file

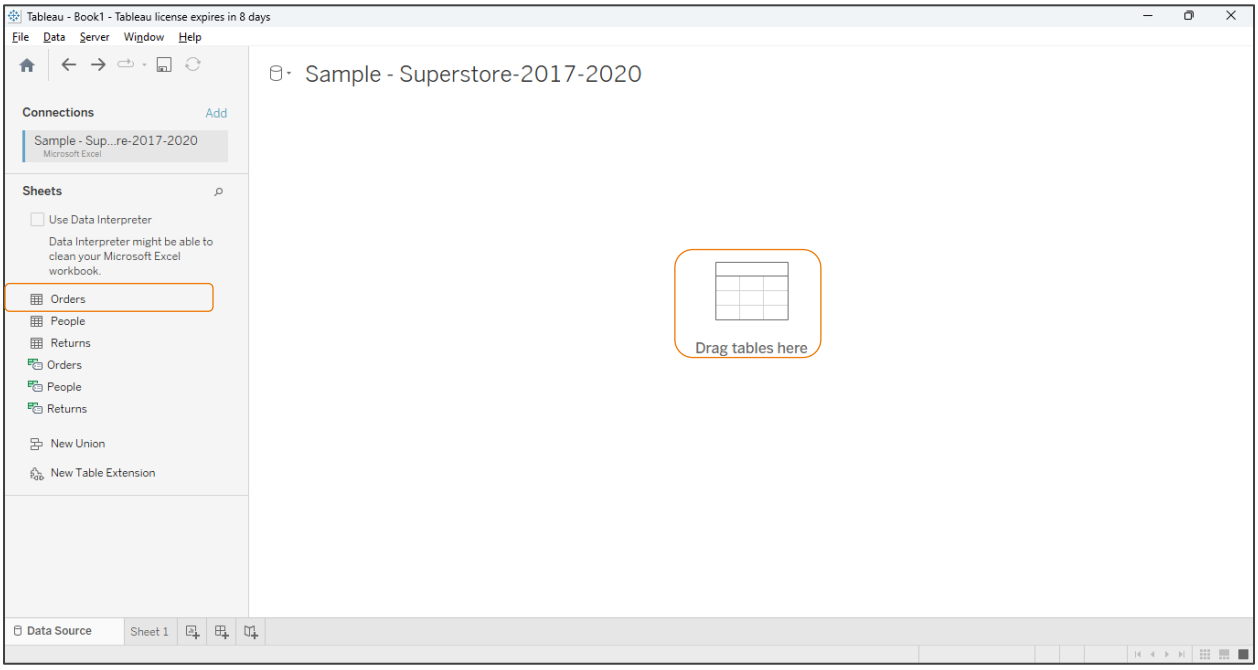
1.1 Open the Tableau Desktop home page and click on the **Microsoft Excel** option



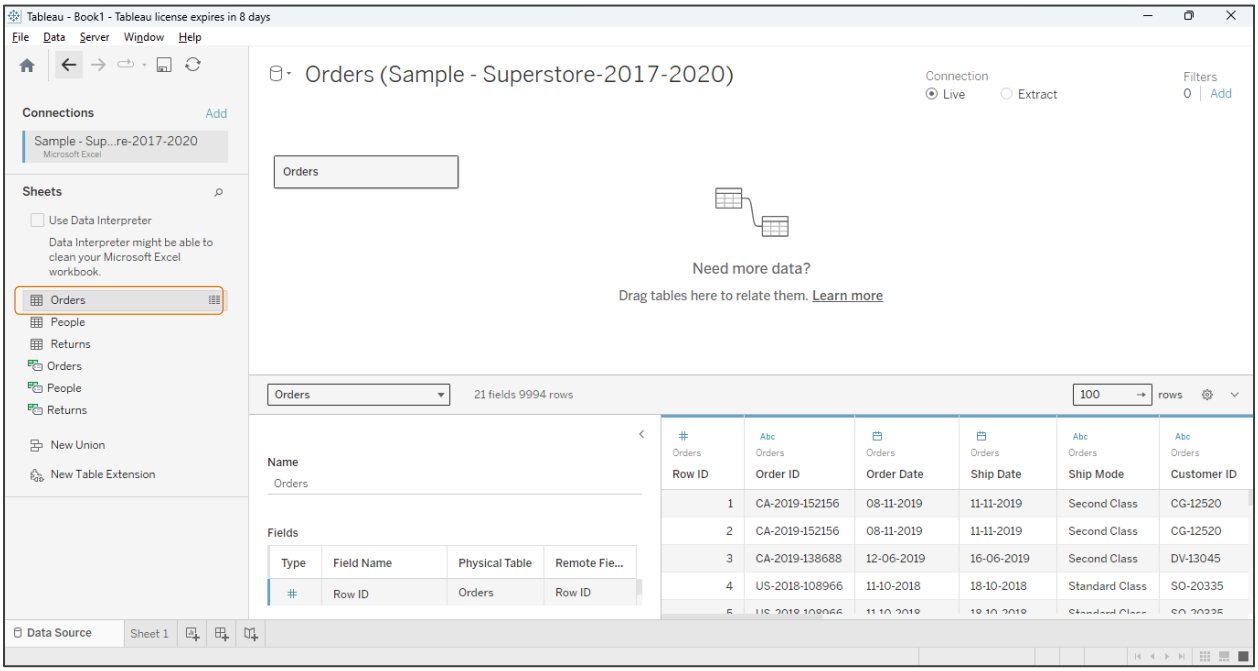
1.2 Select the **Sample - Superstore-2017-2020** file and click on **Open**



1.3 After opening the Excel file, drag and drop **Orders** from Sheets to the center of the home page at **Drag tables here**

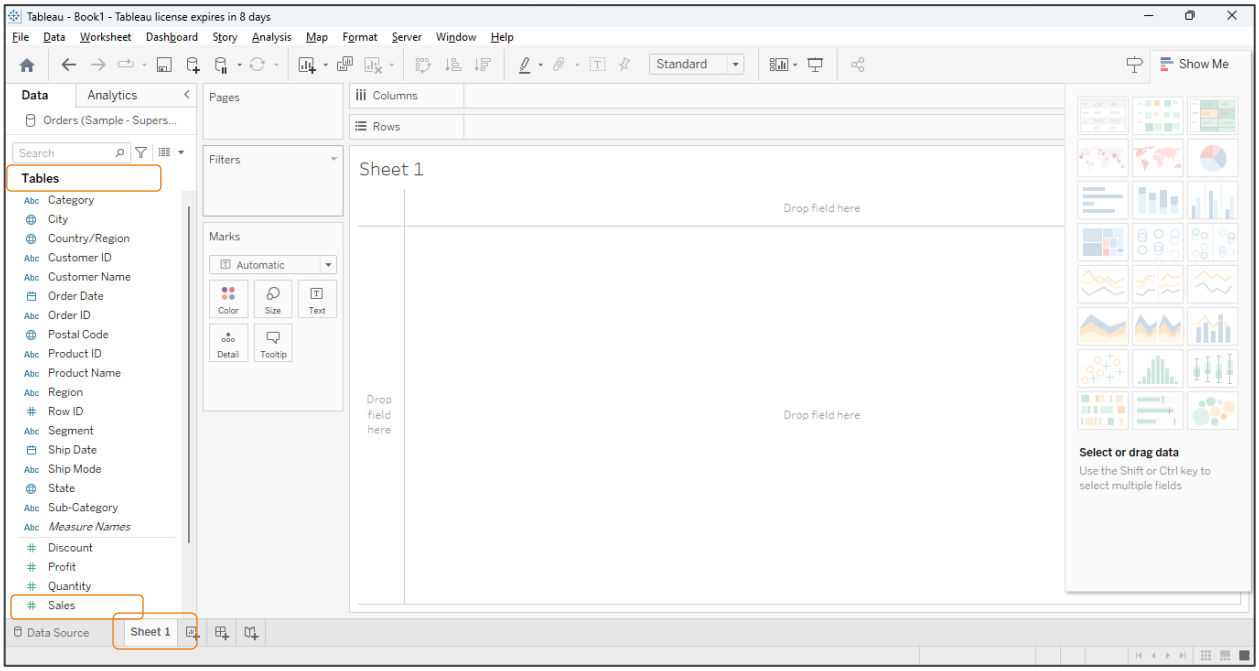


The Tableau home page will appear as below:

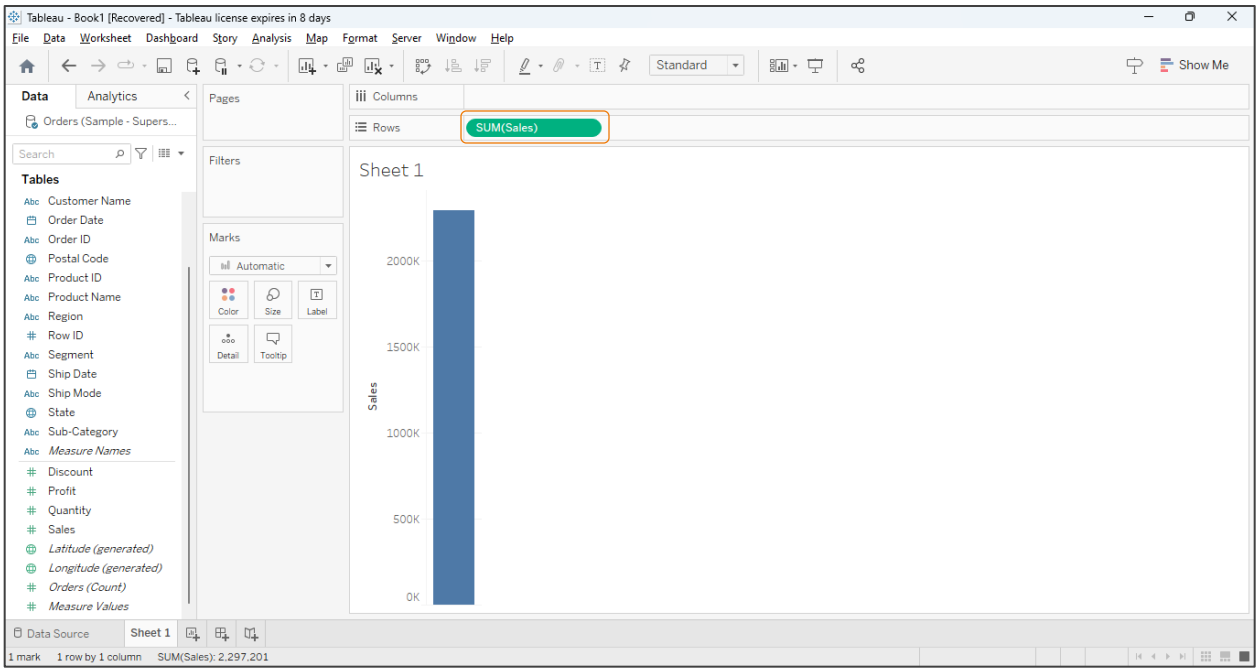


Step 2: Drag Sales to Rows

2.1 Click on **Sheet 1** from the bottom of the page to open a new sheet. **Sales** can be found in **Tables** at the left-bottom side of the home page.

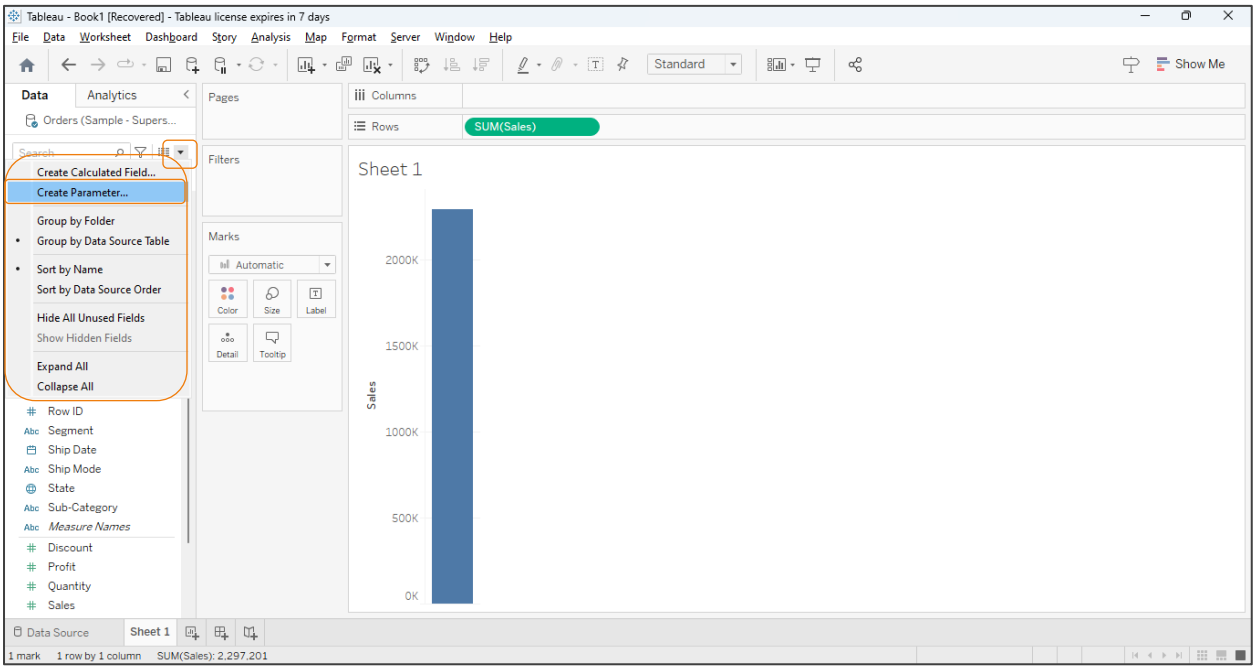


2.2 Drag and drop **Sales** into the **Rows** field

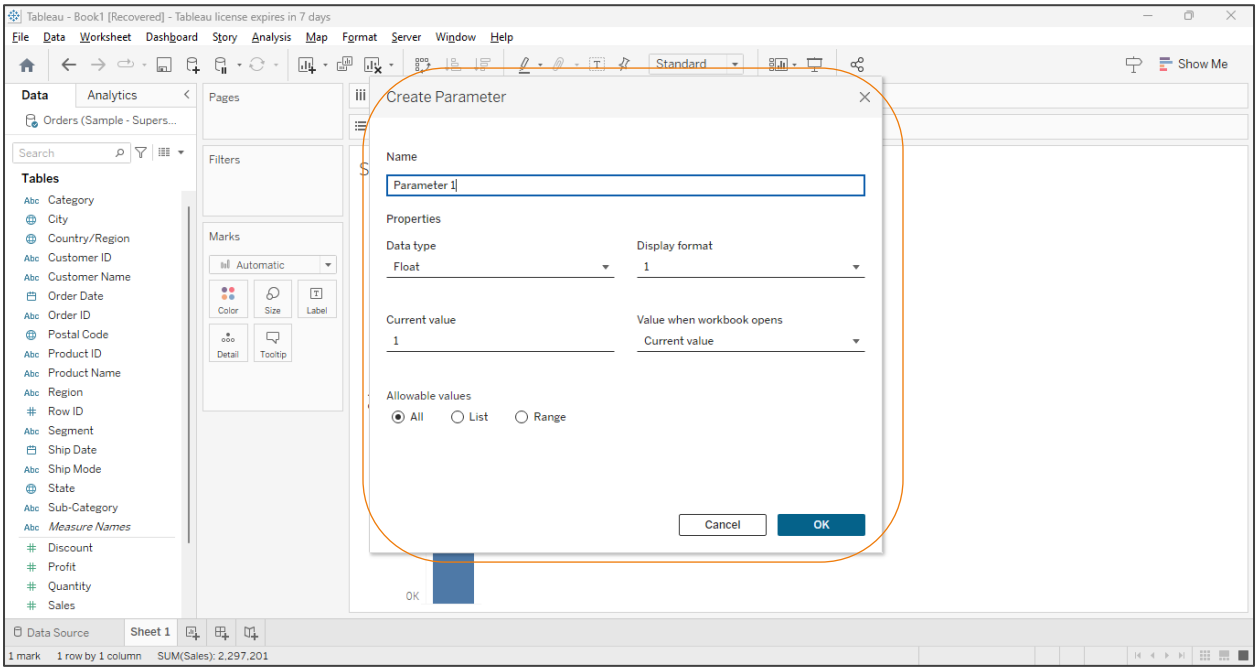


Step 3: Open the Parameter window and create a Parameter

3.1 Click on the downward icon present below the **Data** pane and beside the search field. The following tab appears on the screen.

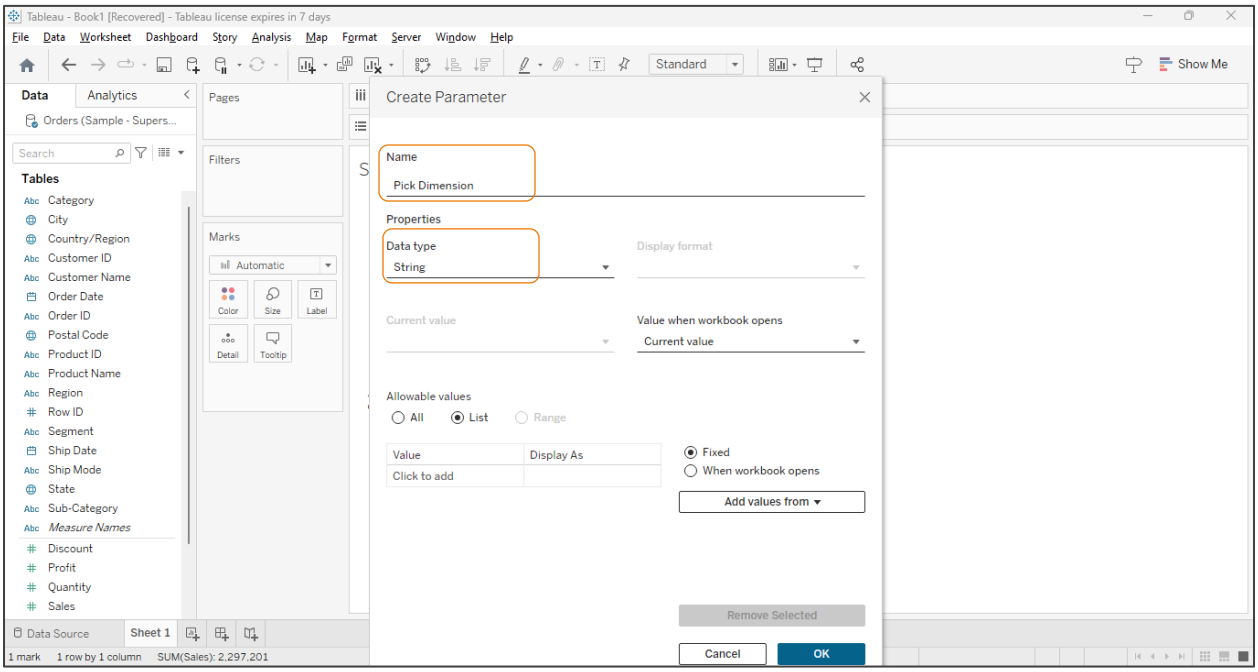


3.2 Next, click on **Create Parameter** (from the previous screenshot). A new tab **Create Parameter** opens as given below:

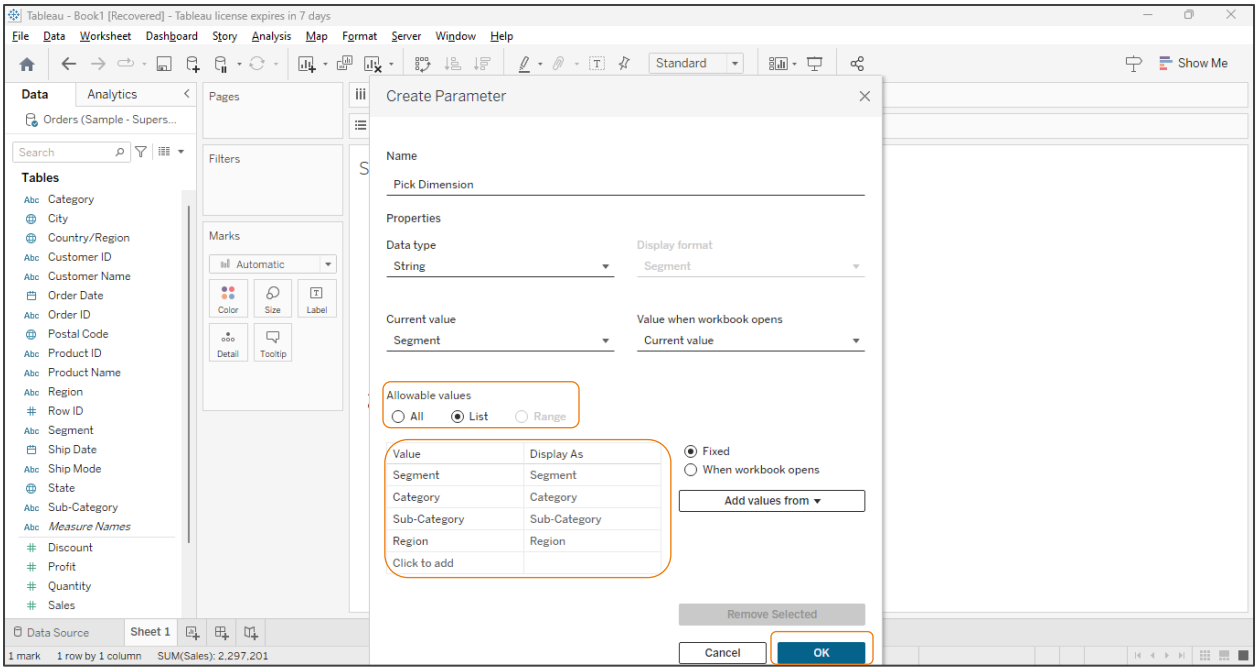


3.3 Change the following details in the **Create Parameter** tab

- Set **Name** as **Pick Dimension**
- Set **Data Type** as **String**

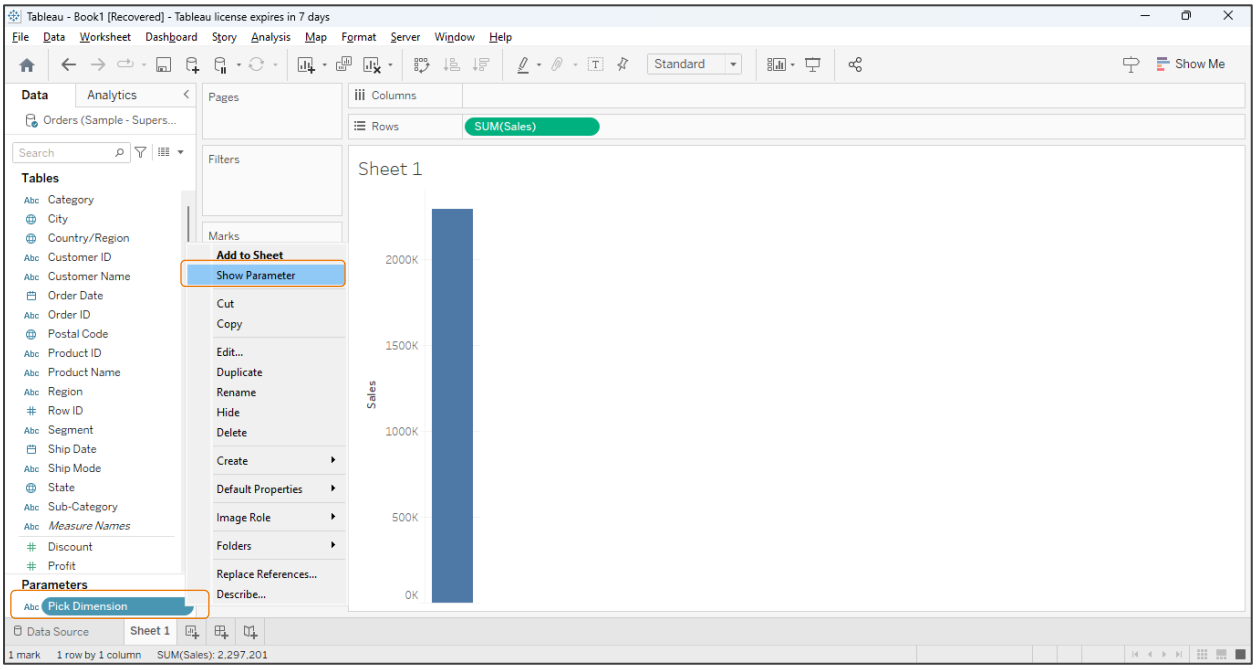


- Select **Allowable Values** as **List** and put the names of dimensions **(Segment, Category, Sub-Category,** and **Region)** in the **Value** column as shown below and then click on **OK**

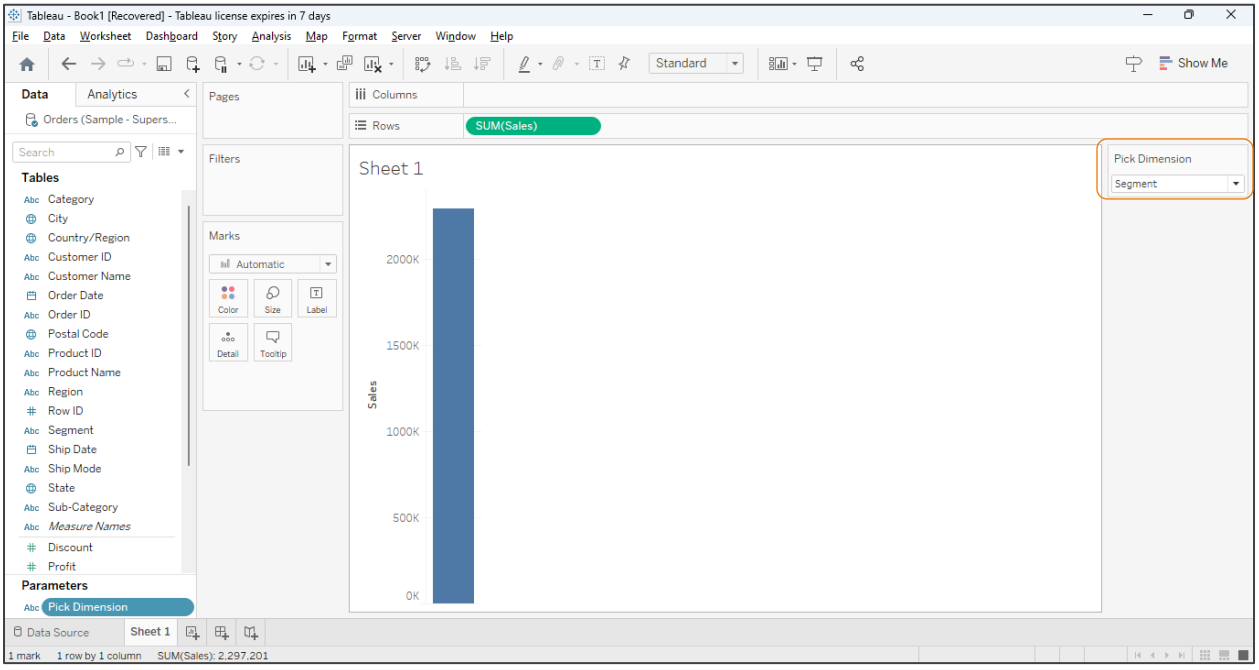


Step 4: Show Parameter control and move it below the Marks card

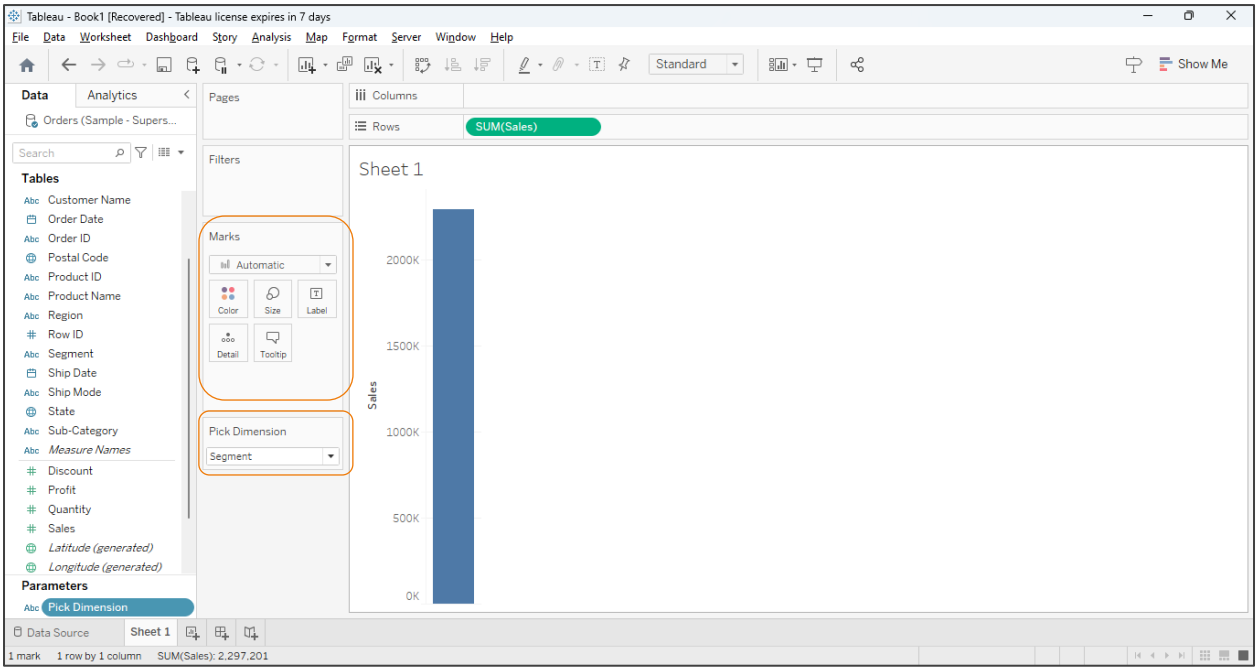
4.1 On the left-bottom side of the home page, from **Parameters**, right-click on **Pick Dimension** and select the **Show Parameter** option



A new box **Pick Dimension** shows up on the right side of home screen as shown below:



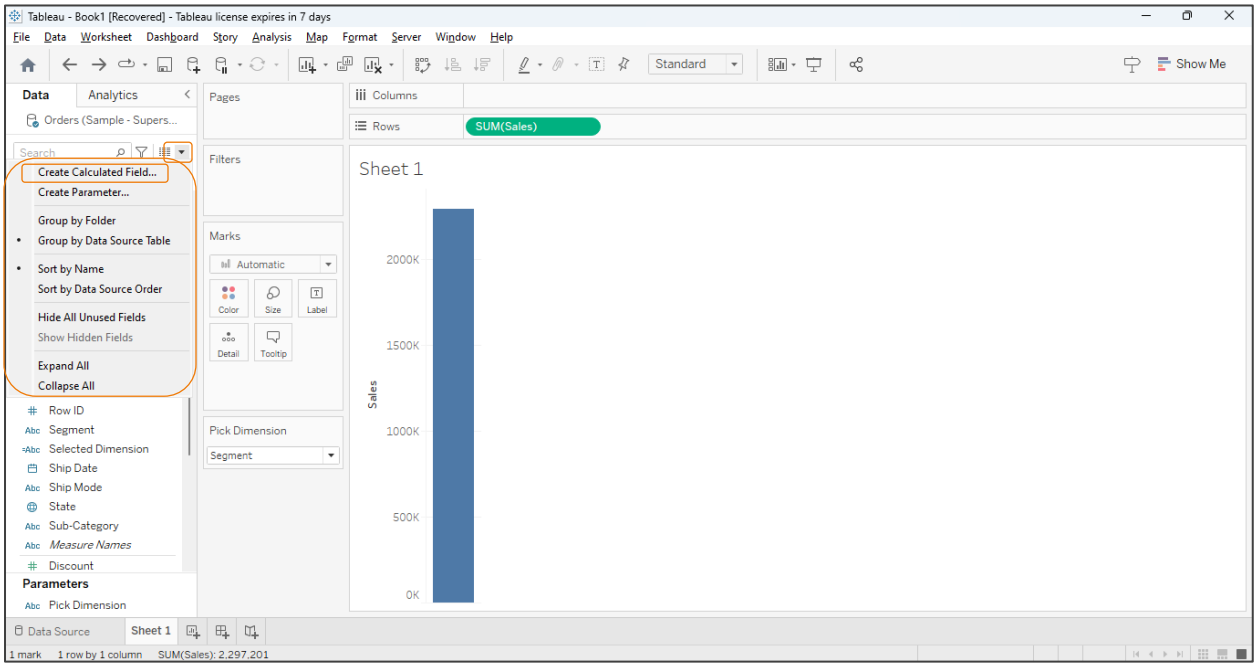
4.2 Drag and drop the **Pick Dimension** box (shown in the previous screenshot) below the **Marks** card



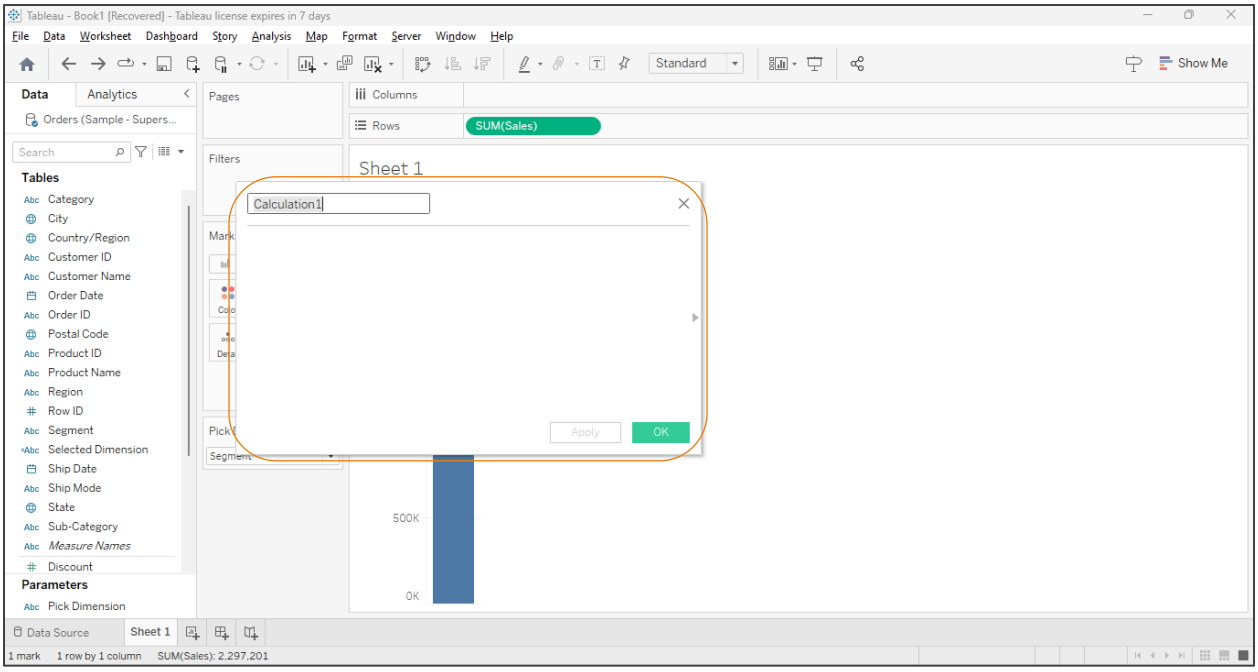
Note: This parameter is inactive now and needs to be connected to the chart to be able to show the dimension in the chart. For this, we need to create the calculation as shown below.

Step 5: Create a calculation to connect the Parameter with the chart

5.1 Click on the dropdown below the **Data** pane. A new tab opens as shown below:

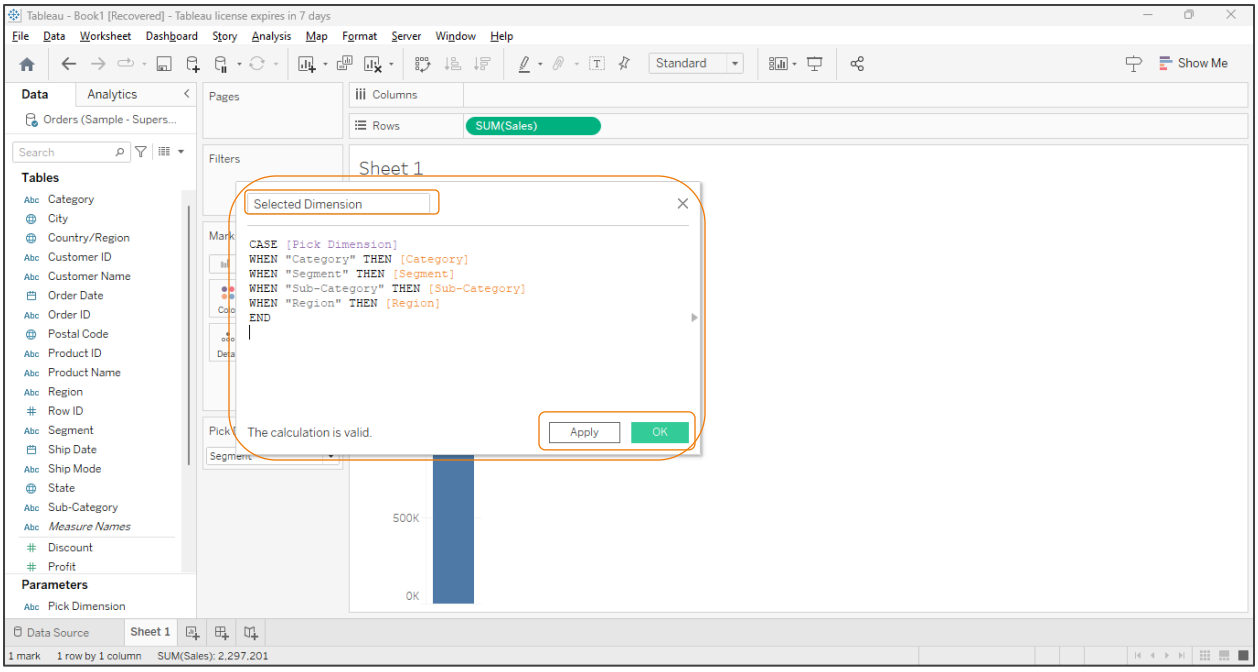


5.2 Click on **Create Calculated Field** (from above screenshot). A new tab appears as shown below:

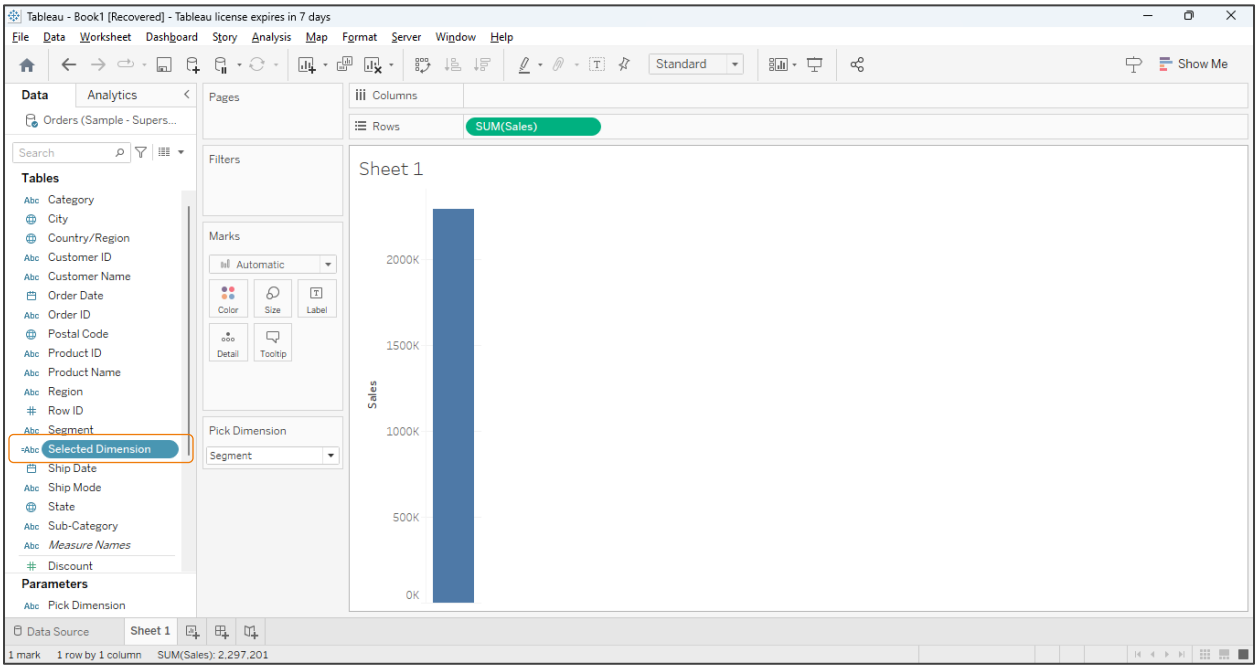


5.3 Name the field as **Selected Dimension** and write the calculation given below:

```
CASE [Pick Dimension]
WHEN "Category" THEN [Category]
WHEN "Segment" THEN [Segment]
WHEN "Sub-Category" THEN [Sub-Category]
WHEN "Region" THEN [Region]
END
```

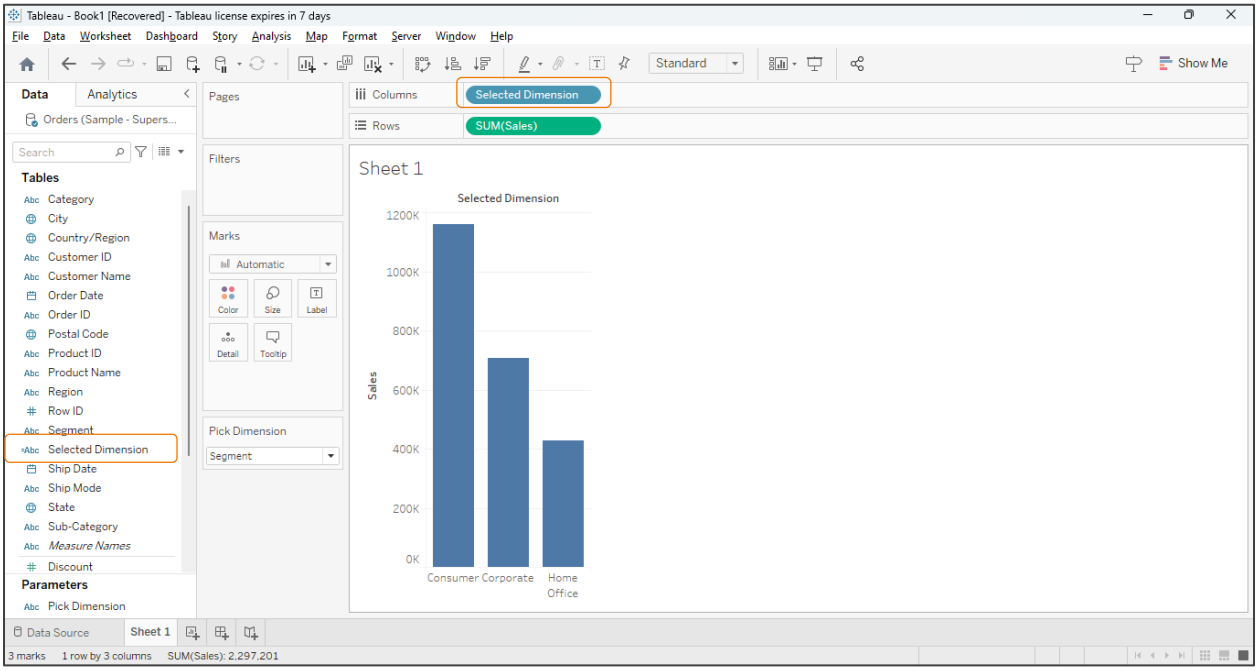


5.4 Click on **Apply** and **OK** from the previous step. A new calculation field **Selected Dimension** will be created.

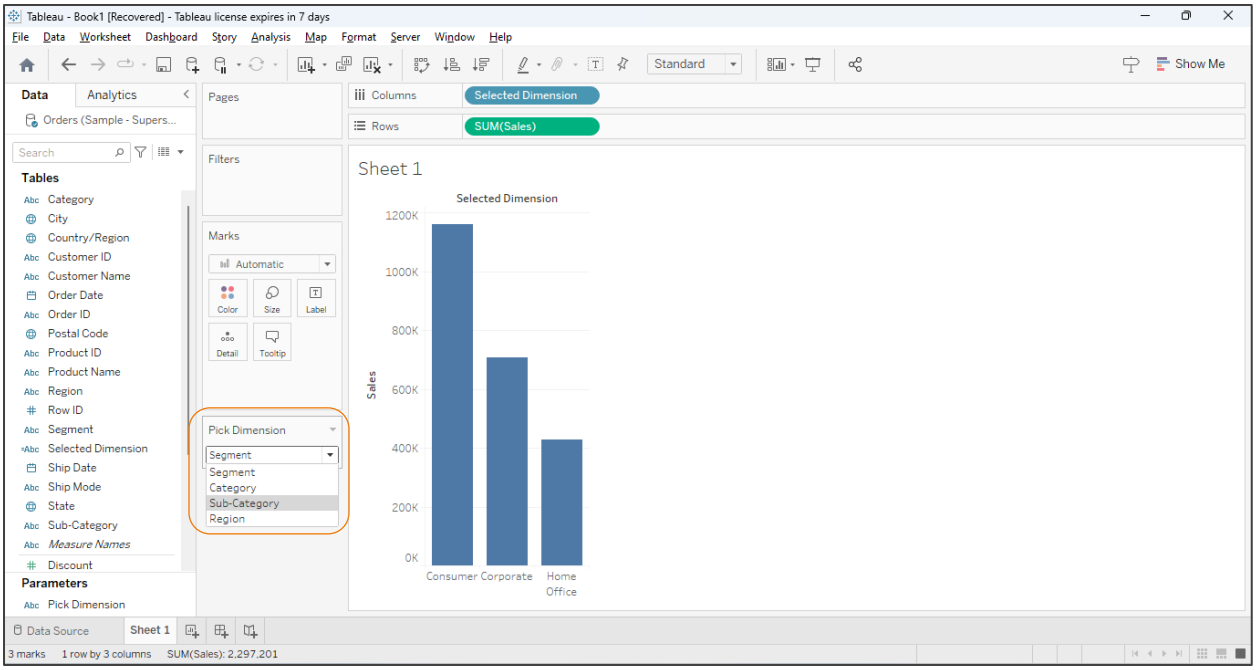


Note: In the calculation, first mention the name of the field from the Parameter in the quotes, for example, Category, and then link it with the Dimension Category written in the box bracket as [Category].

5.5 Drag this **Selected Dimension** to the **Column** shelf as shown below:

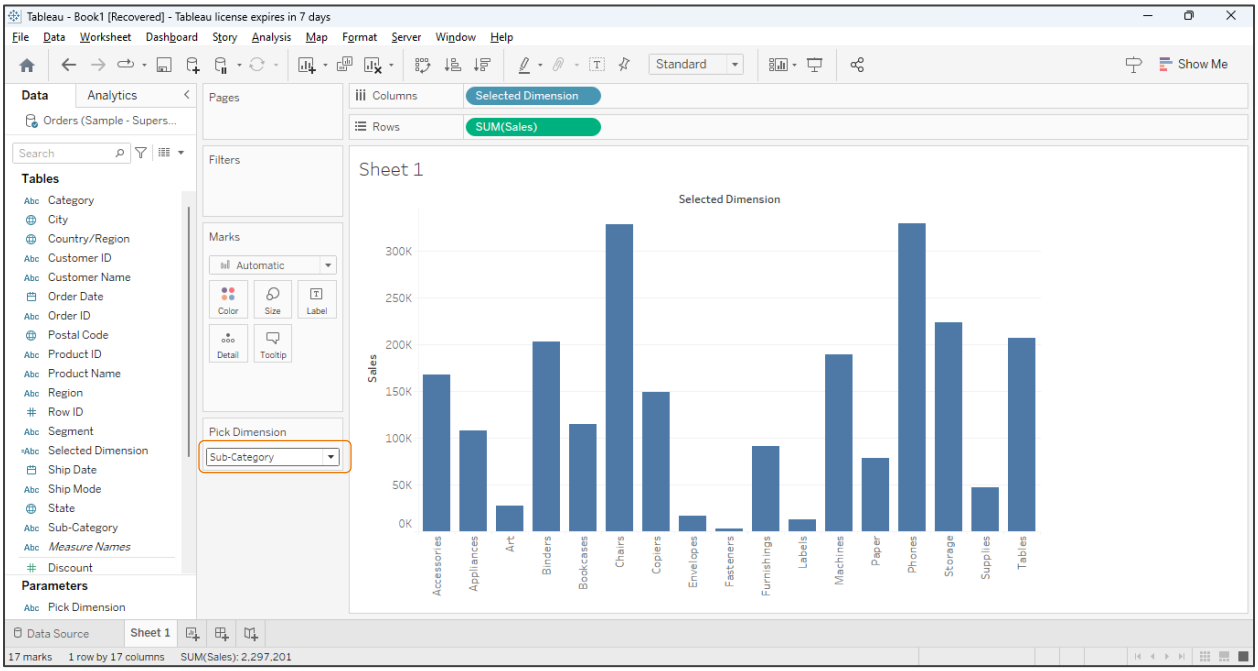


5.6 Now, from the **Pick Dimension** box present below the **Marks** card, select different dimensions as shown in the following steps. For each dimension, the chart also changes as shown below:

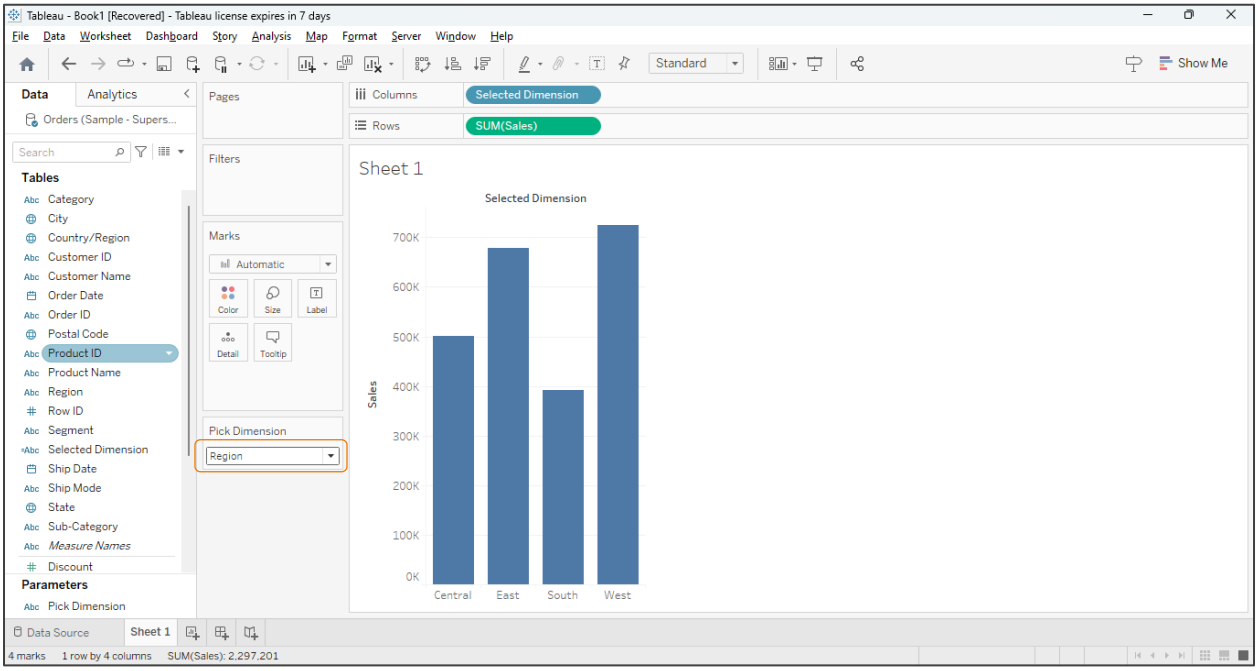


Types of selection:

- For the **Sub-Category** selection as the parameter, the chart appears as shown below:



- For **Region** selection on the Parameter, the chart appears as shown below:



Note: Try changing the dimension from **Pick Dimension** box to Segment and Category and observe how the chart changes.

With this, you have successfully used the analytics pane in Tableau for setting up parameters and dynamically linking charts, culminating in a highly interactive data visualization experience.