Lesson 01 Demo 01
Introduction to Tableau and Its Workspace

Objective: To demonstrate importing and modifying data from different file types in Tableau and navigating its workspace for effective data visualization.

Tools required: Tableau Desktop

Prerequisites: None

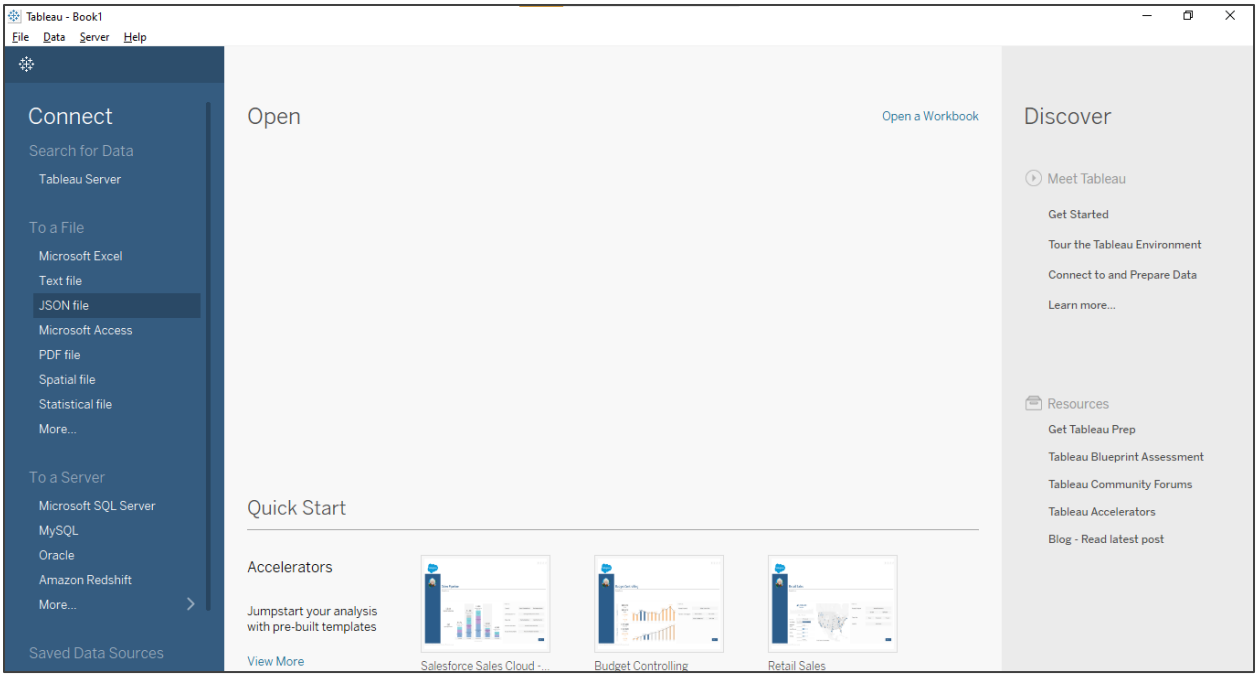
Note: Download the **superstore-excel.xlsx**, **superstore-csv.csv**, **and Sample 2** datasets from the Reference Material of the LMS.

Steps to be followed:

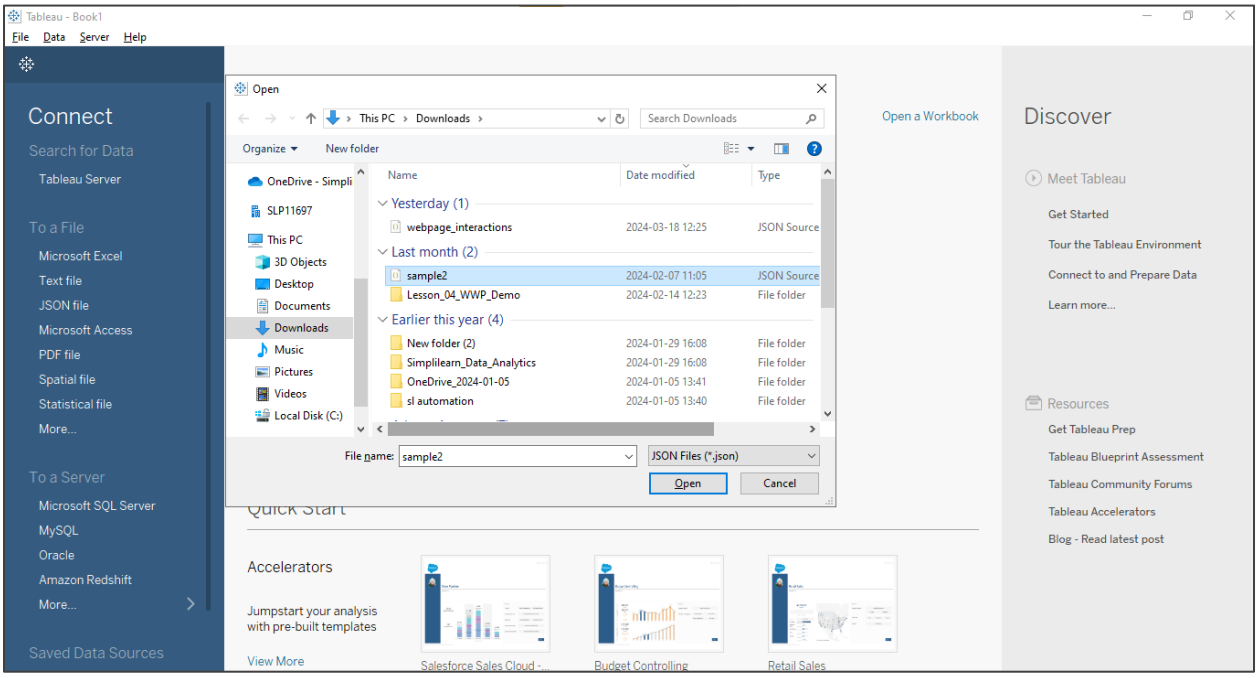
1. Import a JSON file
2. Import the Excel file
3. Preview the data
4. Modify the data
5. View the Tableau Desktop workspace
6. Check the functionality of the Back and Forward buttons
7. Familiarize yourself with the other options on the toolbar
8. View the Show Mark Labels option
9. Change the size of the charts
10. Explore the Show/Hide Cards option
11. Explore the sidebar
12. Observe the sheets tab

Step 1: Import a JSON file

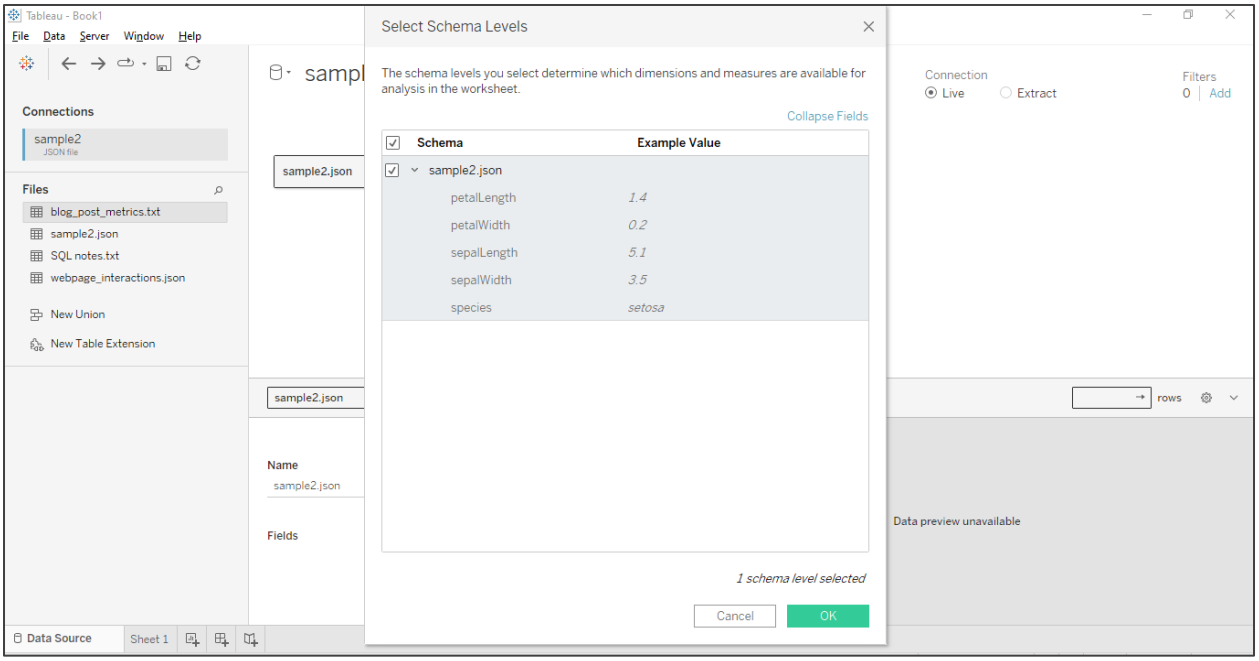
1.1 On the Tableau home page, click on the **JSON file** option



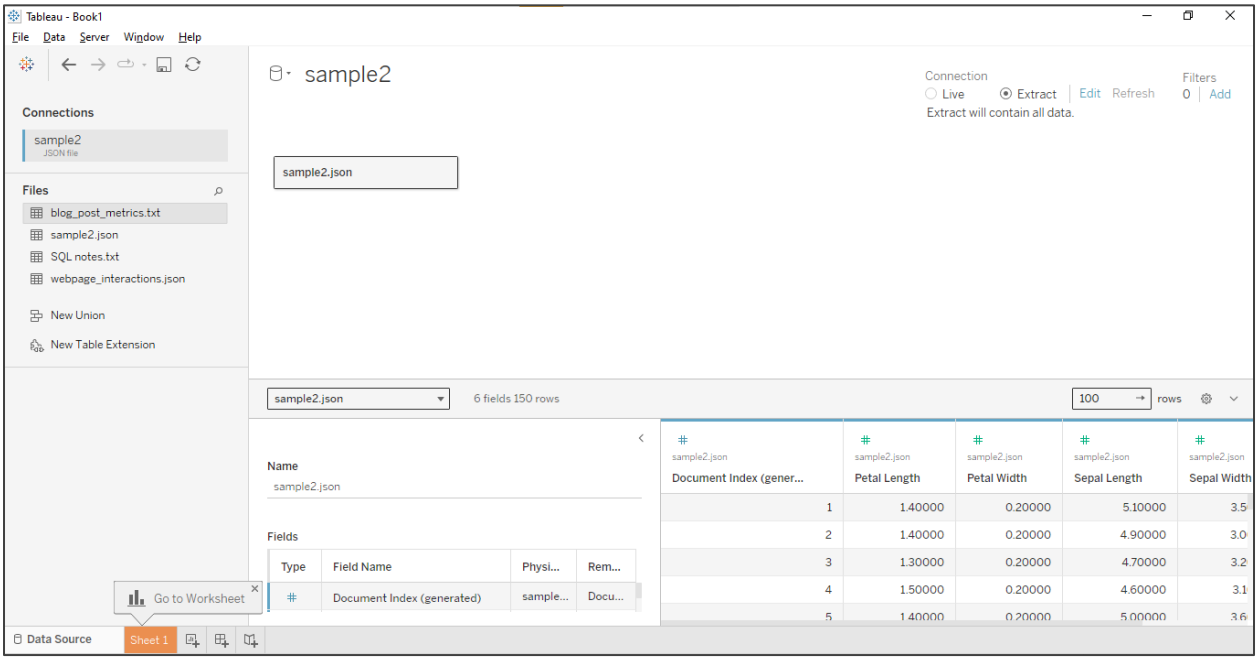
1.2 Select the JSON file **(sample2)** and click on **Open**



1.3 After you choose the **Schema** that needs to be imported, click **OK**.

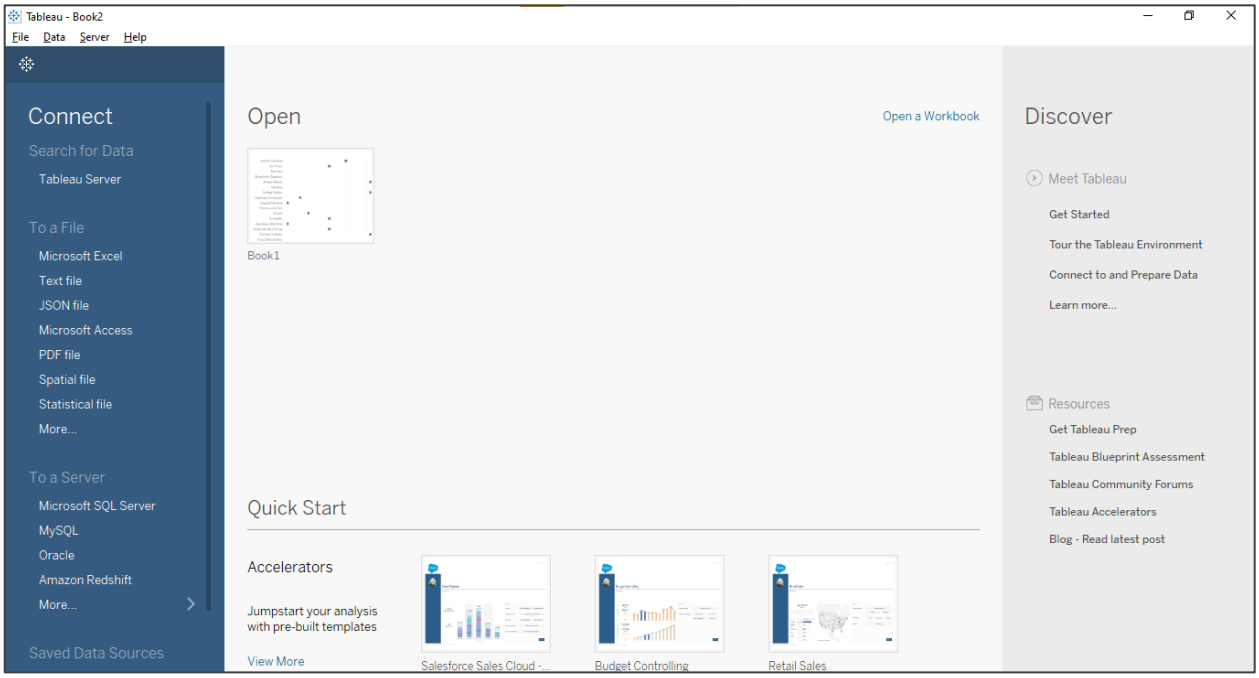


The data available in the JSON file will be displayed on the Tableau workspace.

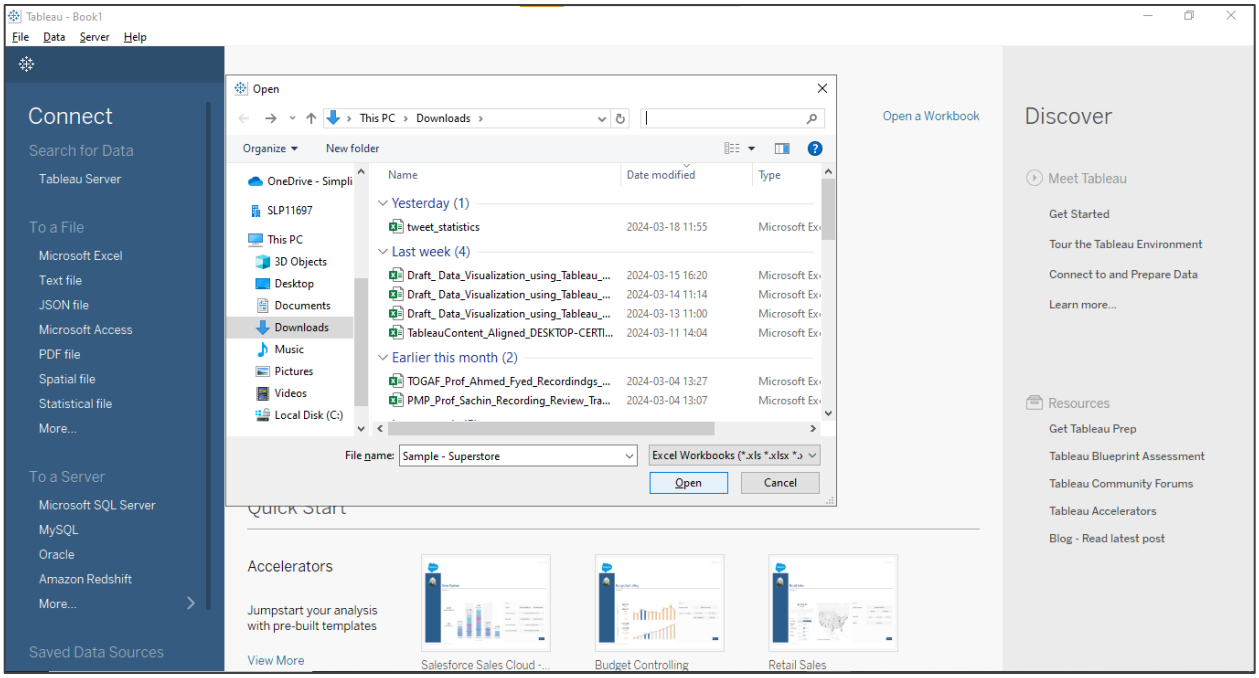


Step 2: Import the Excel file

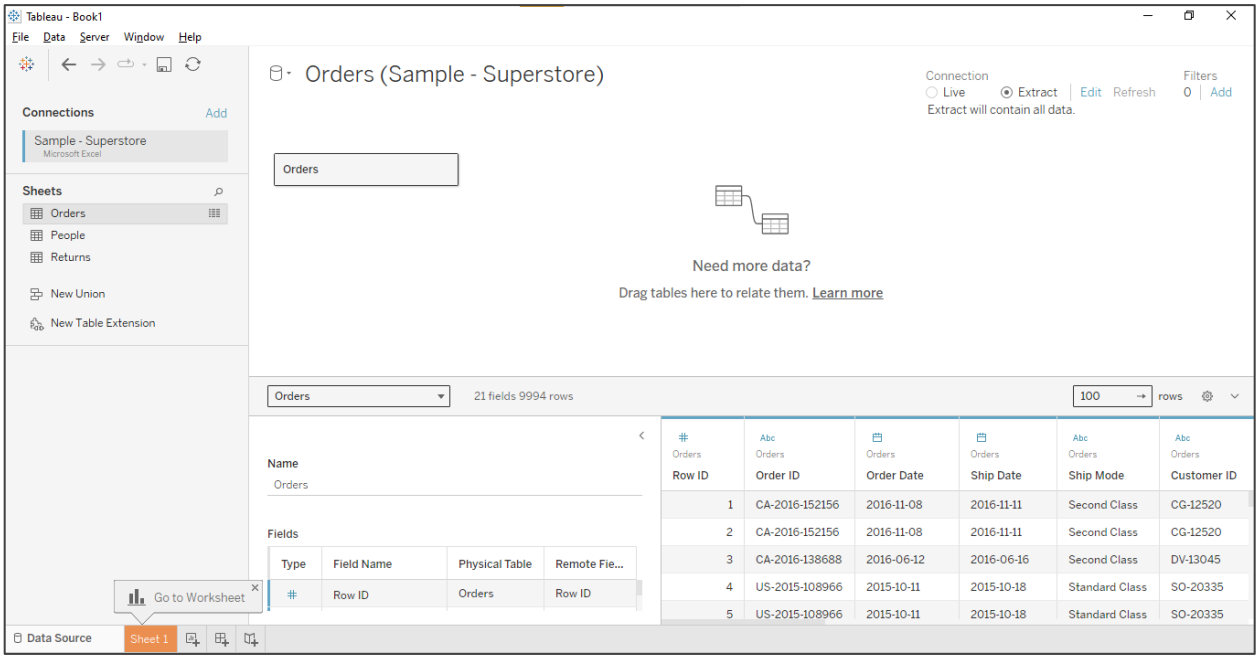
2.1 Open a new Tableau Book, go to the home page of Tableau, and click on **Microsoft Excel**



2.2 Choose the **Sample-Superstore** dataset from your local drive and click on **Open**. Tableau will load and establish a connection with the file.

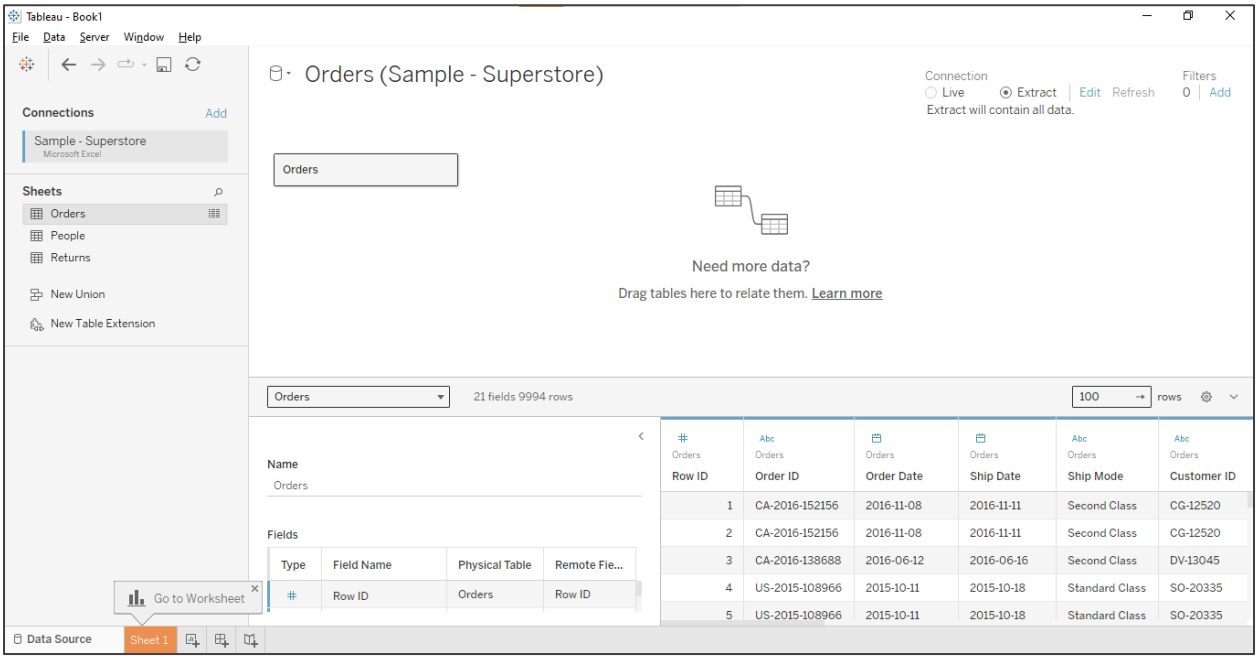


2.3 The **Sheets** are named **Orders**, **People**, and **Returns**. Notice that the data is not viewable at this point. Drag one of the **Sheets** (**Orders**) to the preview pane to view the data. The data will be loaded into Tableau.

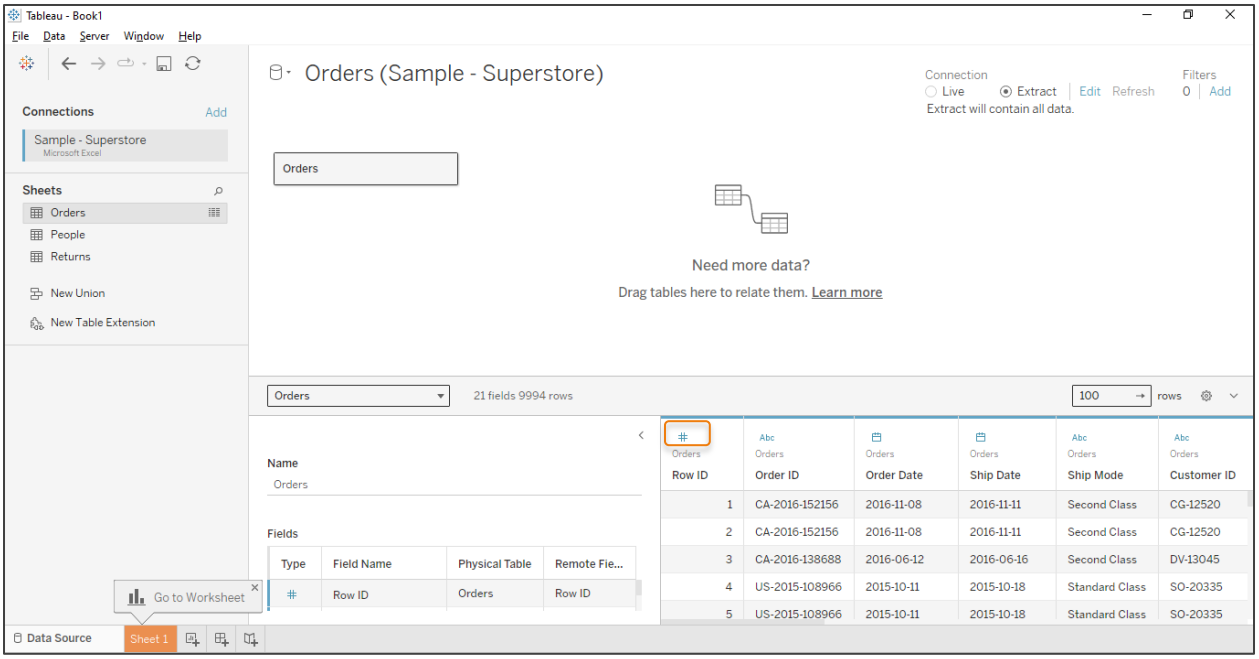


Step 3: Preview the data

3.1 Follow step 2 and drag one of the sheets **(Orders)** to the preview pane to view the data. The data will be loaded into Tableau. You can see the different column names that are available.

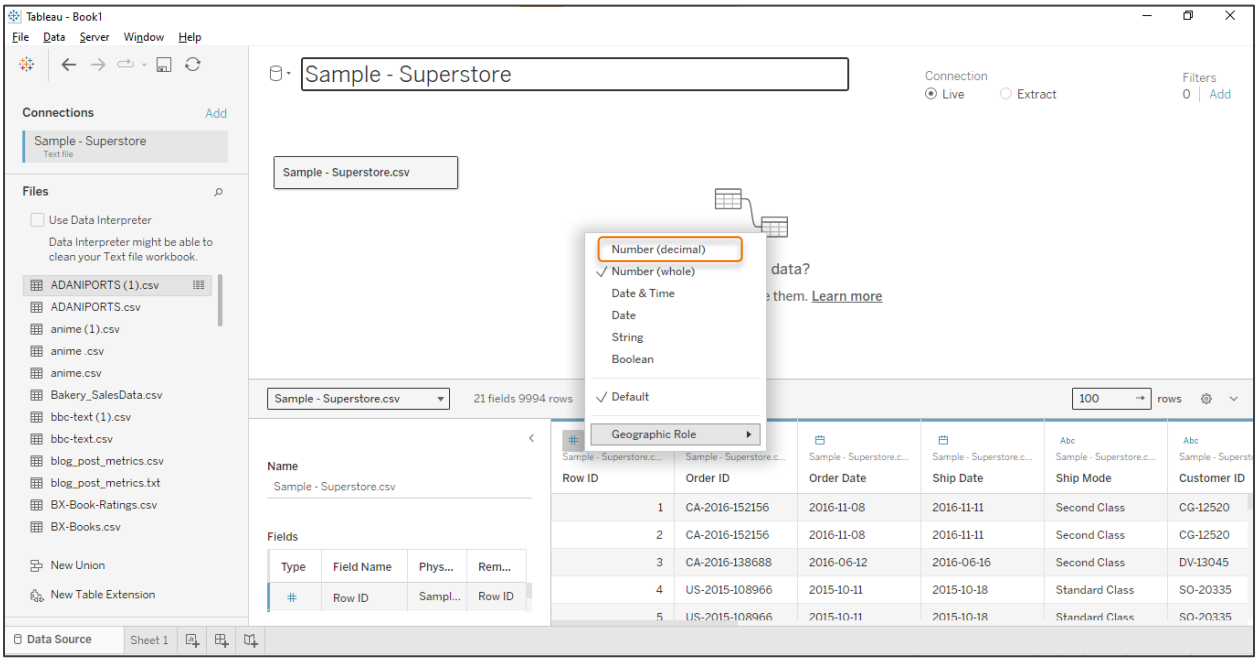


3.2 The table name can be seen as shown below. The **#** symbol means the column data is an integer value.

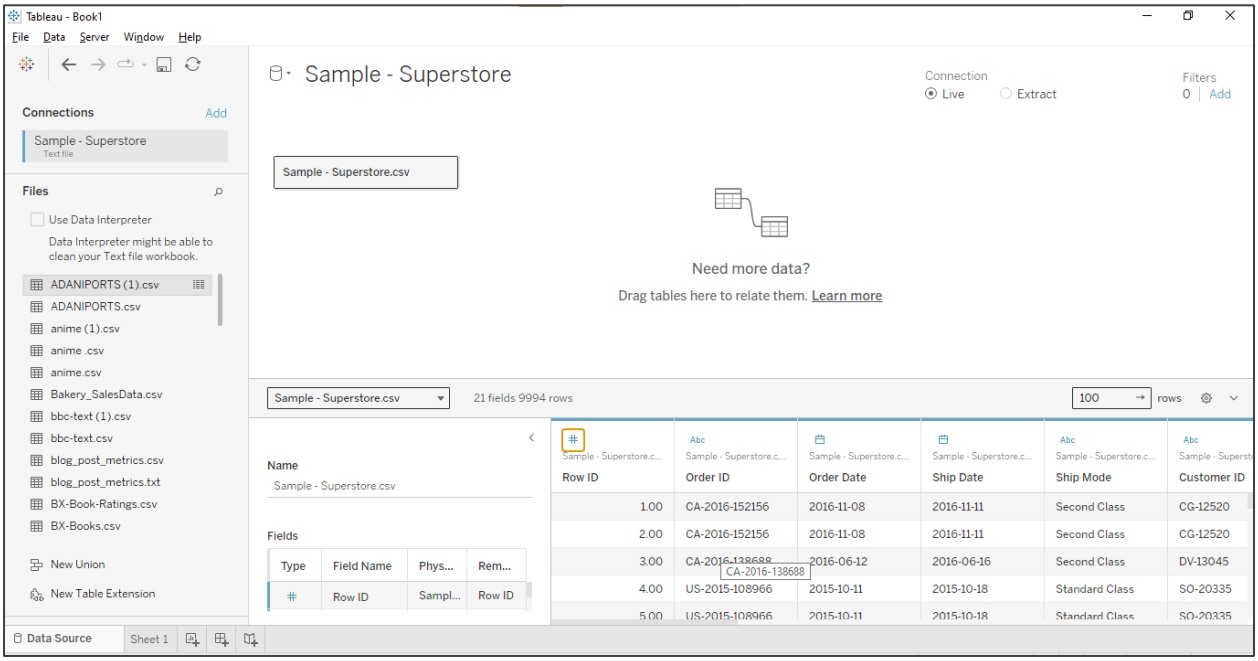


Step 4: Modify the data

4.1 If the data type needs to be changed, click on the data type; here is the **#** symbol. Change the data type to a **Number (decimal)**.

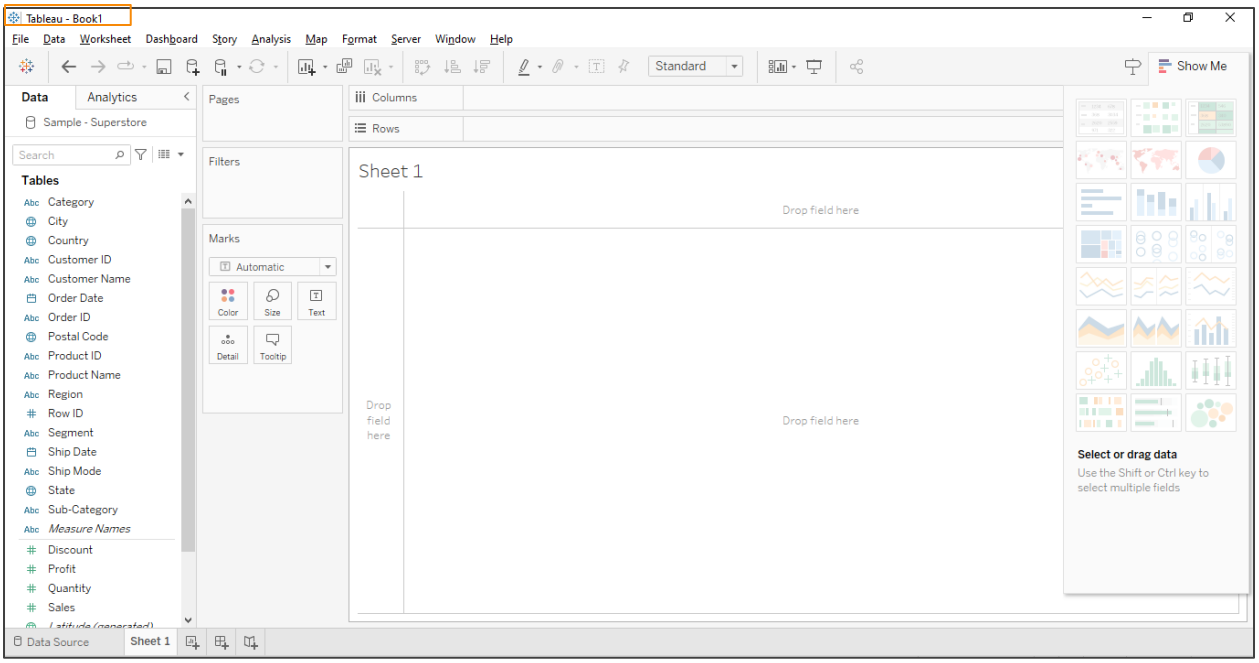


The screenshot below shows that the data type has been changed from integer to decimal.

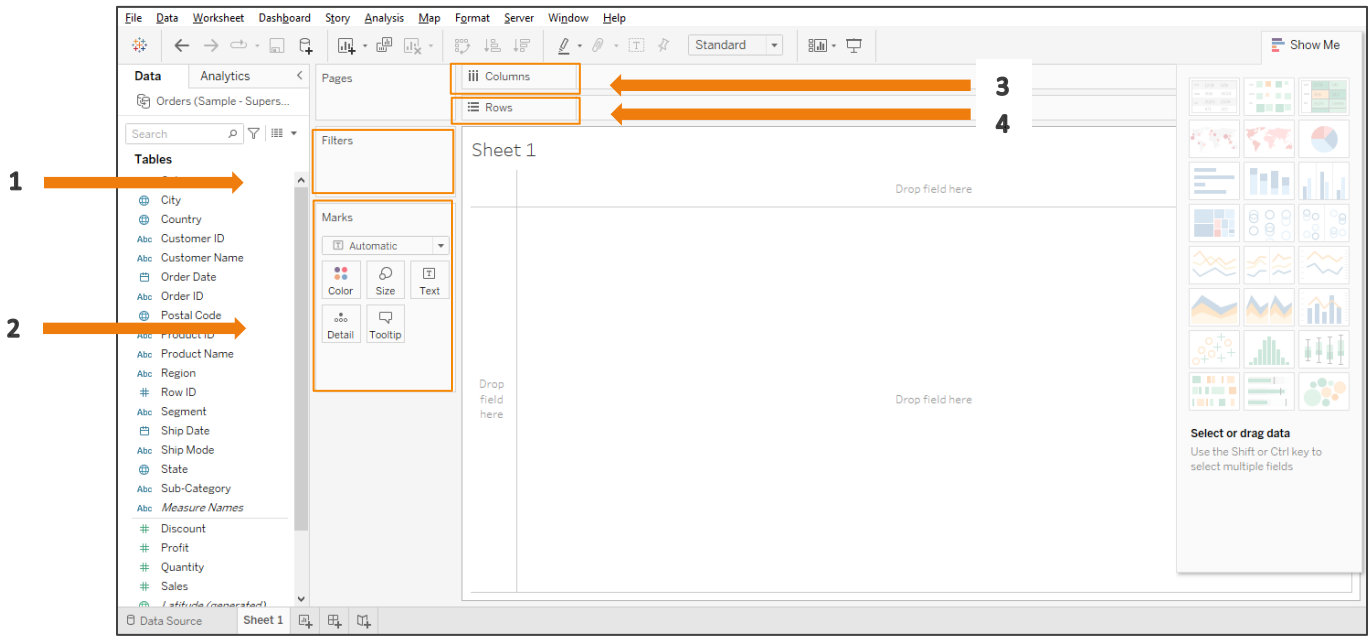


Step 5: View the Tableau Desktop workspace

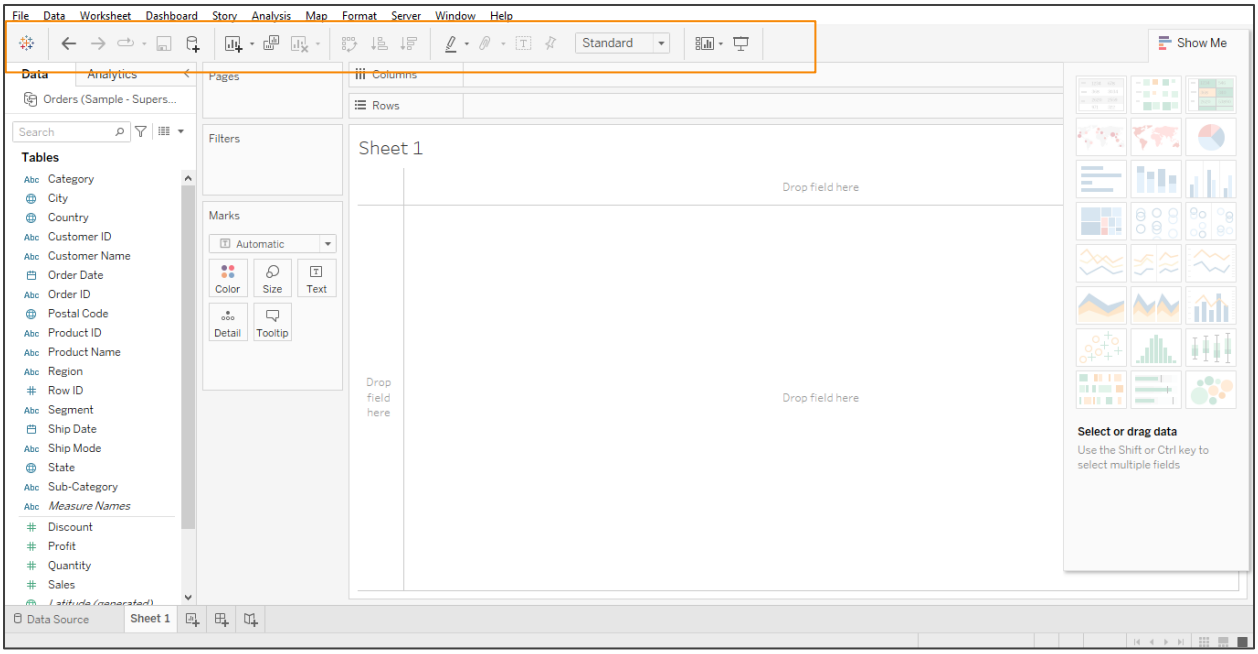
5.1 Click on **Sheet1**, view the top left corner, which displays the workbook name



The **Filters** shelf, **Marks**, **Columns,** and **Rows** shelves are indicated by numbers 1, 2, 3, and 4, respectively, in the workbook, as shown in the screenshot.

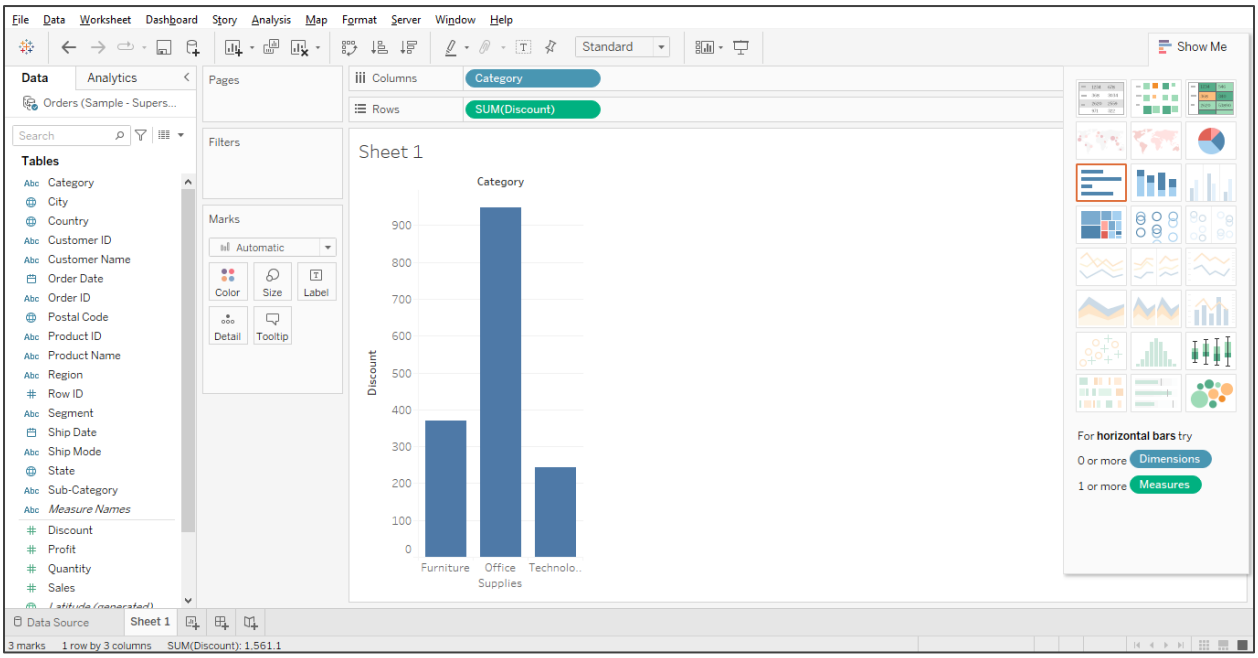


The toolbar can be seen in the screenshot below.

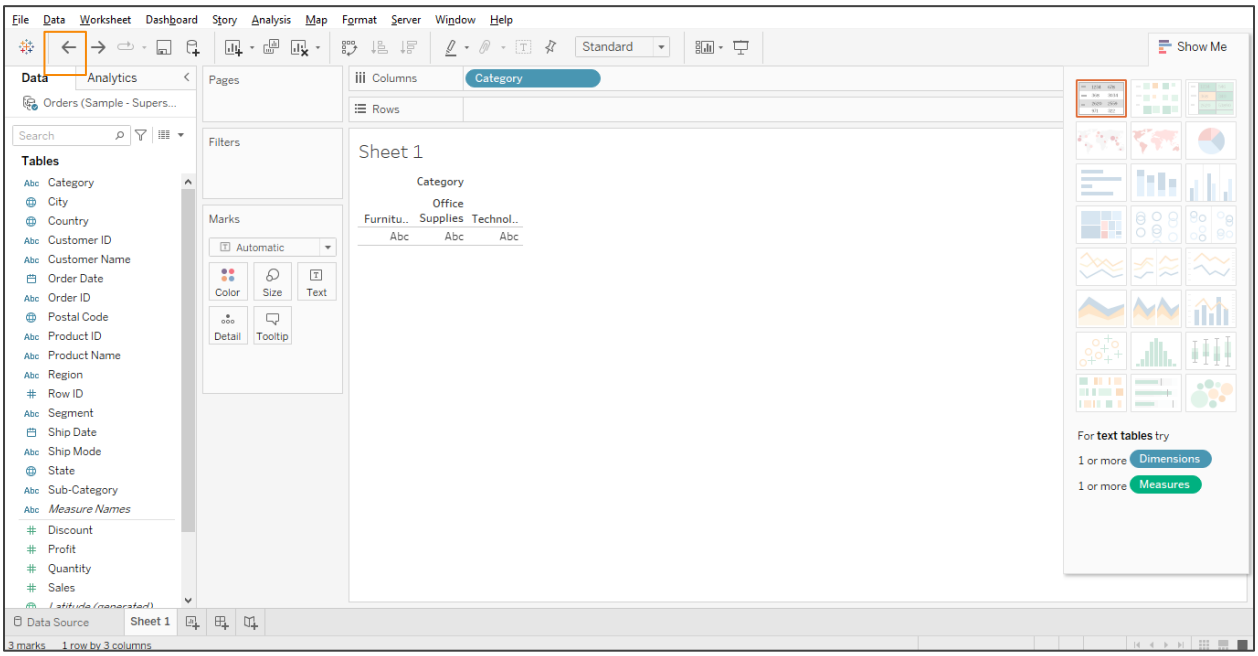


Step 6: Check the functionality of the Undo and Redo buttons

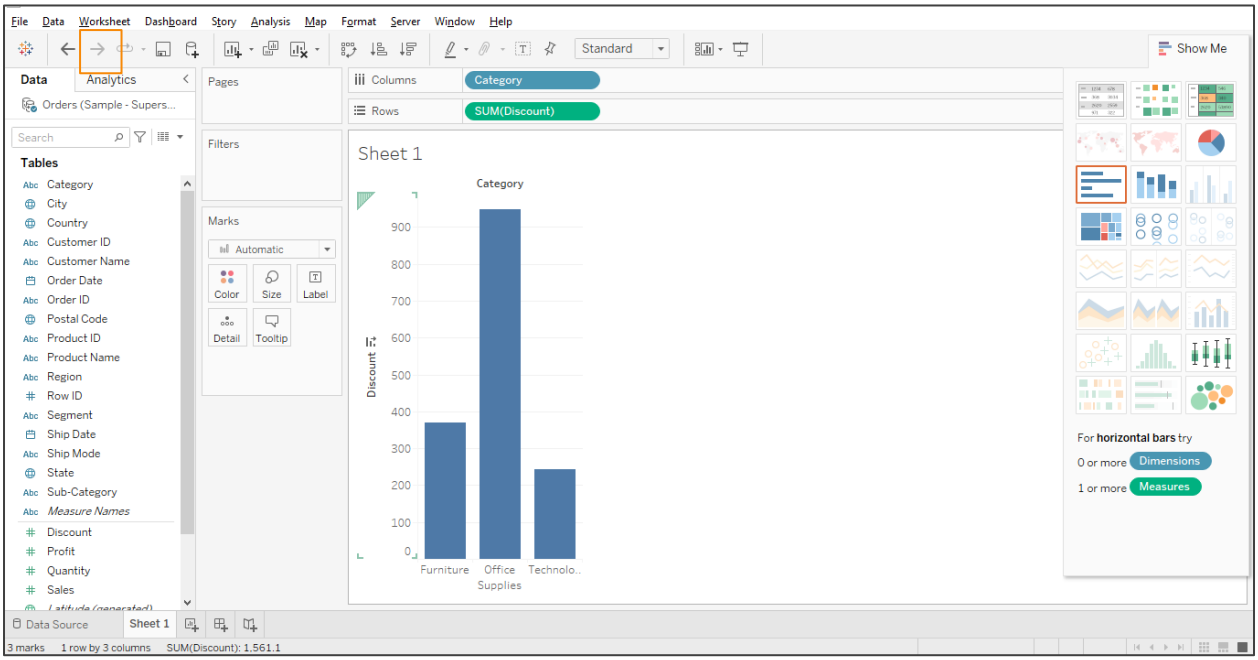
6.1 Drag **Category** to **Columns** and **Discount** to **Rows.** The resulting chart looks like this:



6.2 Click the **Undo** button and Tableau will show the previous state

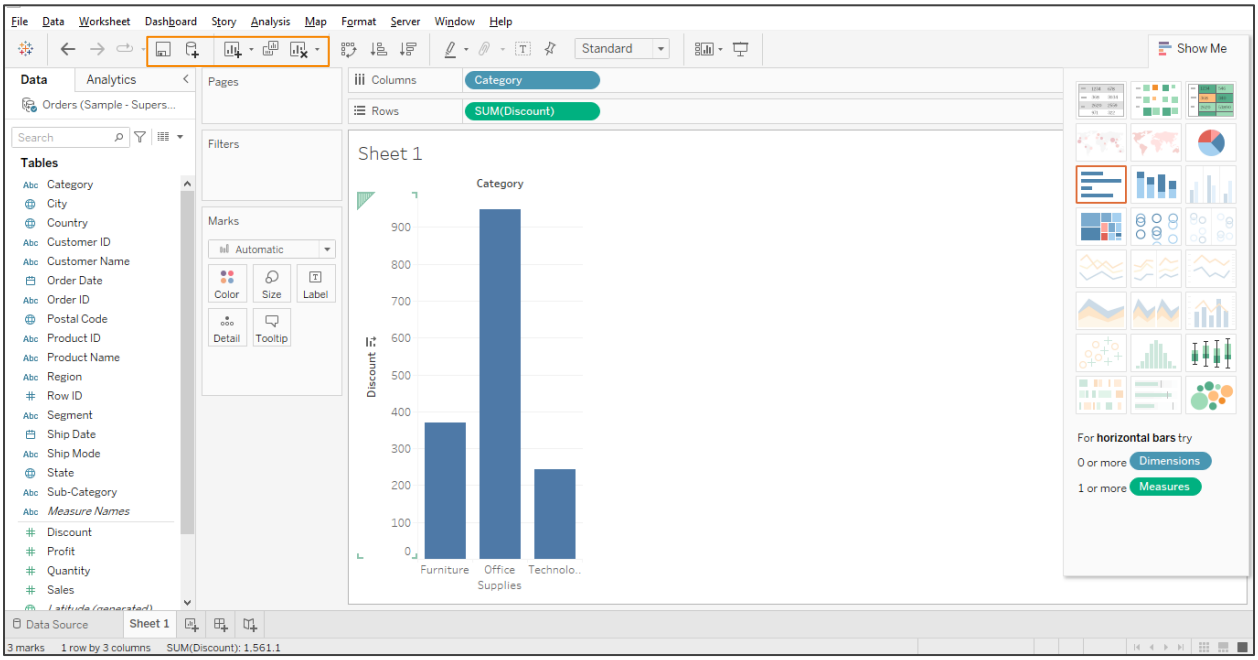


6.3 Click the **Redo** button and Tableau will show the original state

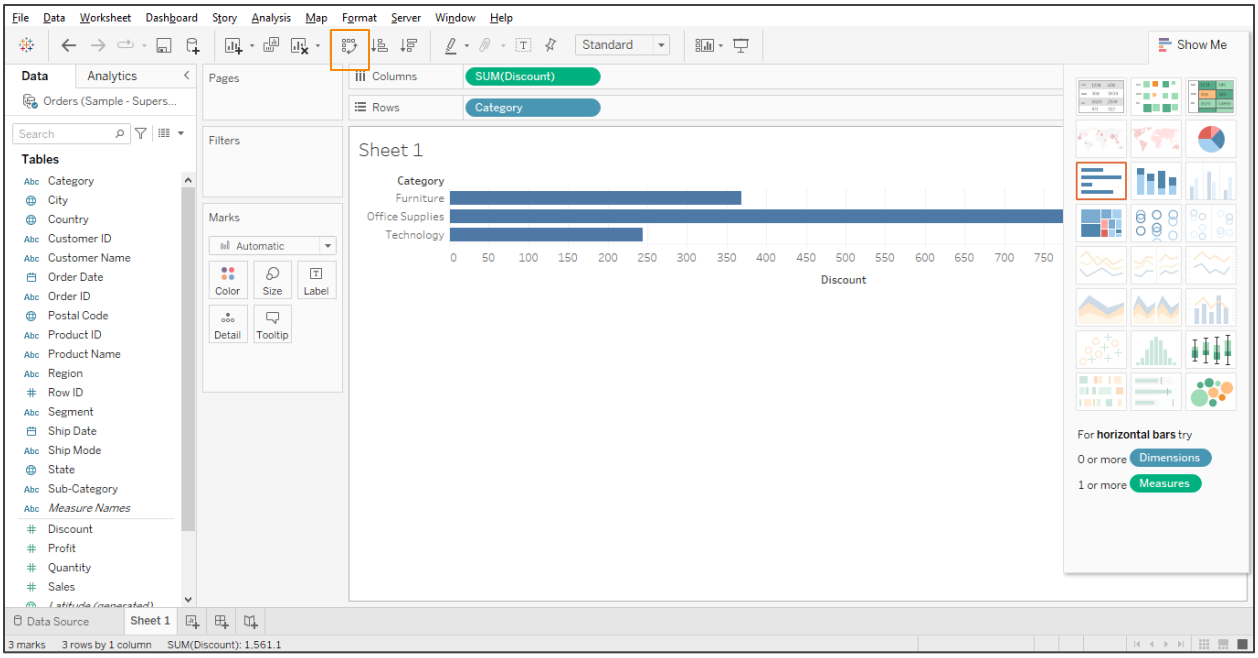


Step 7: Familiarize yourself with the other options on the toolbar

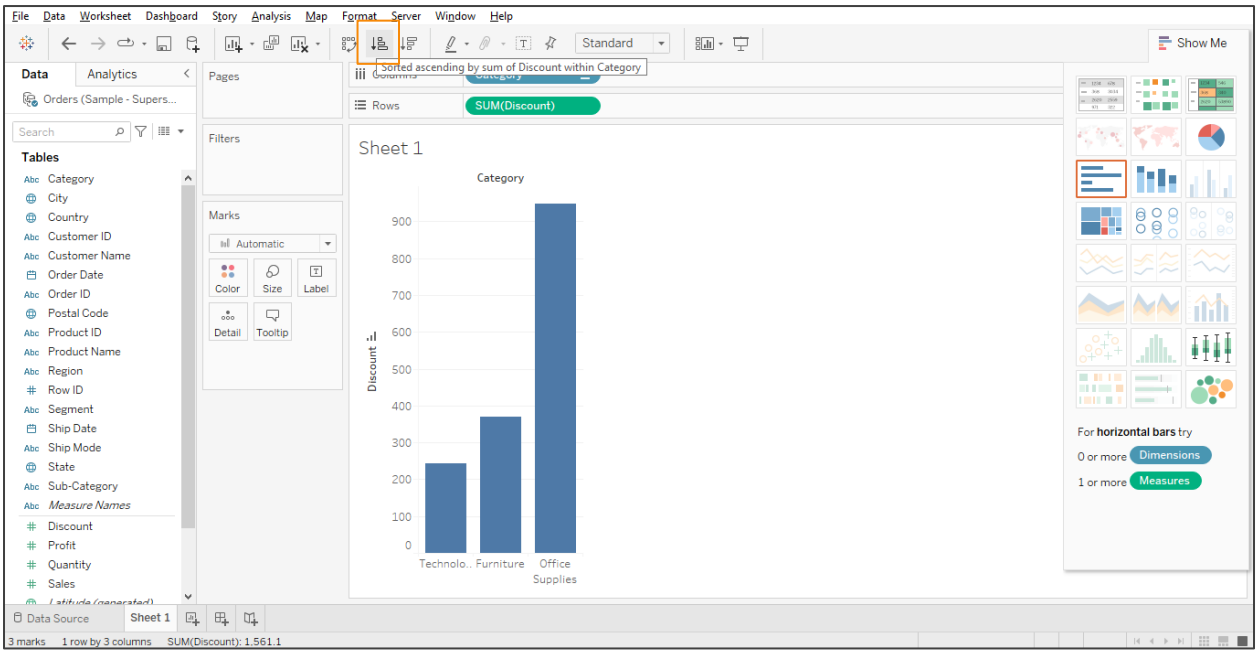
The screenshot below shows the **Save**, **New Data Source**, **New Worksheet**, **Duplicate**, and **Clear Worksheet** buttons, in the respective order, from left to right.



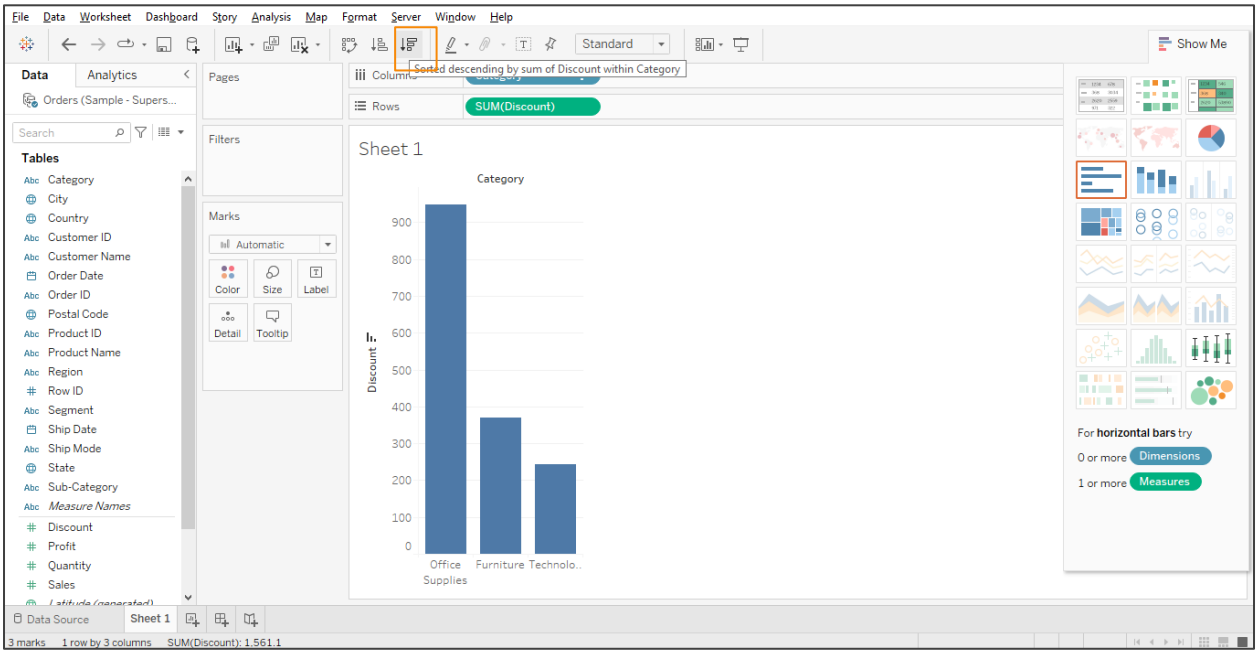
7.1 Click on the **Swap Rows and Columns** option, you can swap the current columns with rows. The **Category** and **SUM (Discount)** fields have switched positions, and the graph has changed accordingly.



7.2 Next on the toolbar is the **Sort Ascending** button. Click it, and the **Category** bars will sort in ascending order.

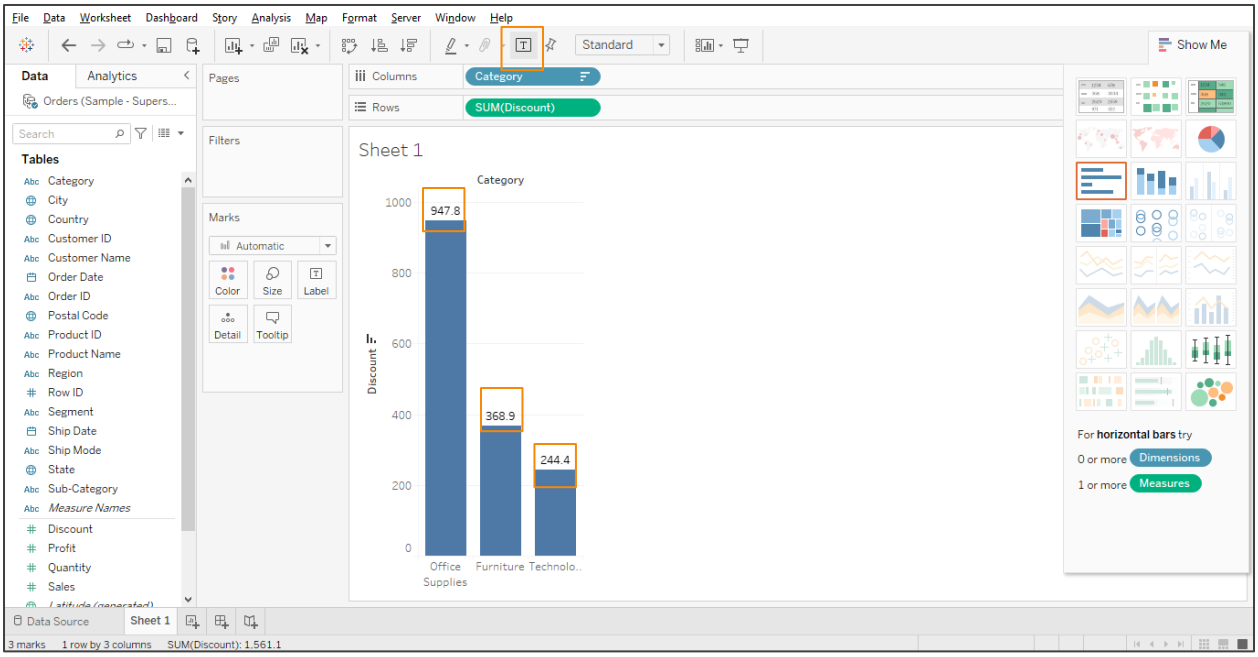


7.3 Next on the toolbar is the **Sort Descending** button. Click it, and the **Category** bars will sort in descending order.



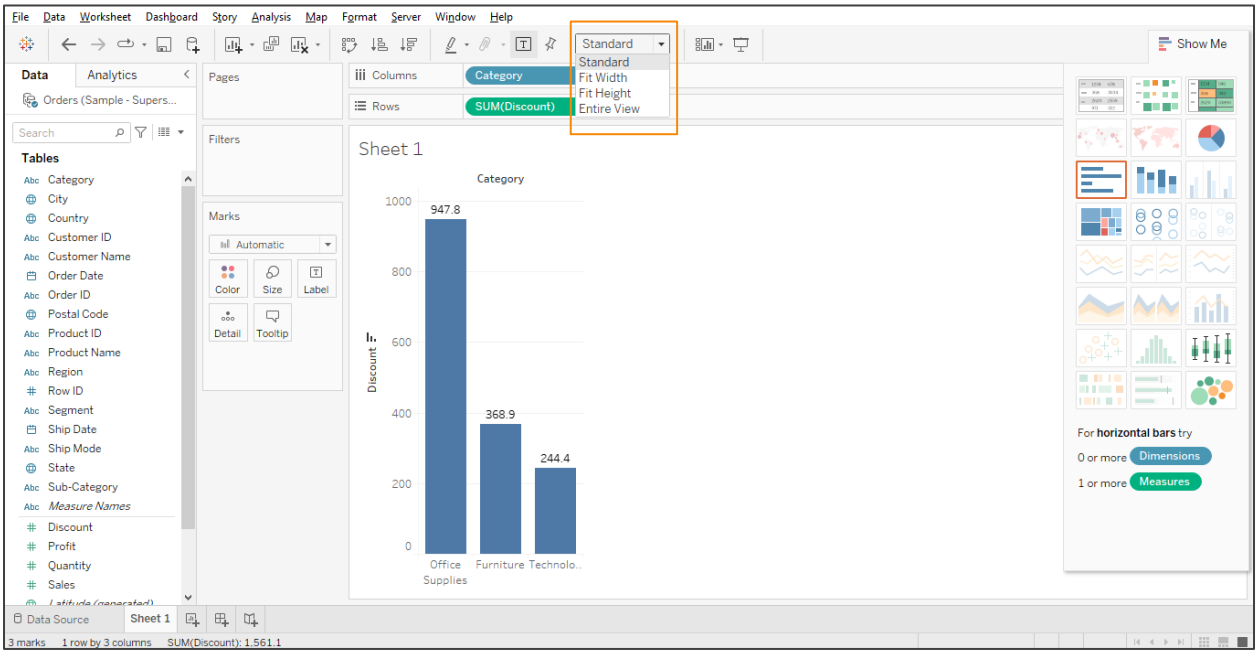
Step 8: View the Show Mark Labels option

8.1 Click on the **Show Mark Labels** option. Now you can see that the label has been generated for each of the individual bars.

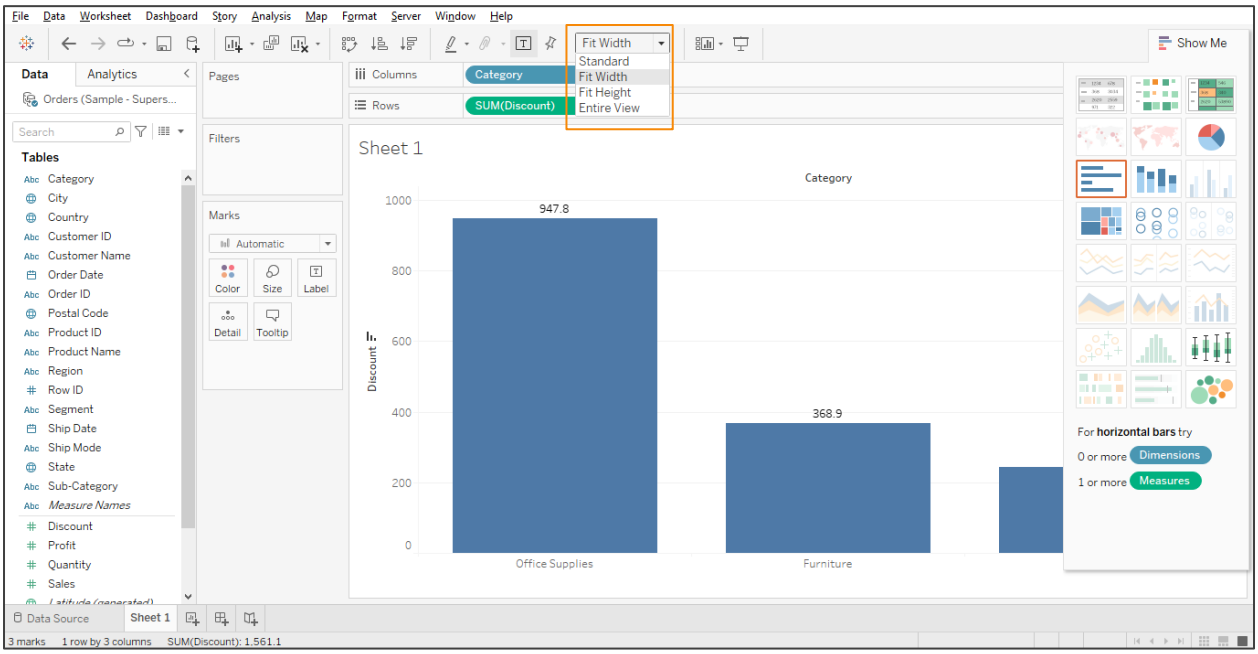


Step 9: Change the size of the charts

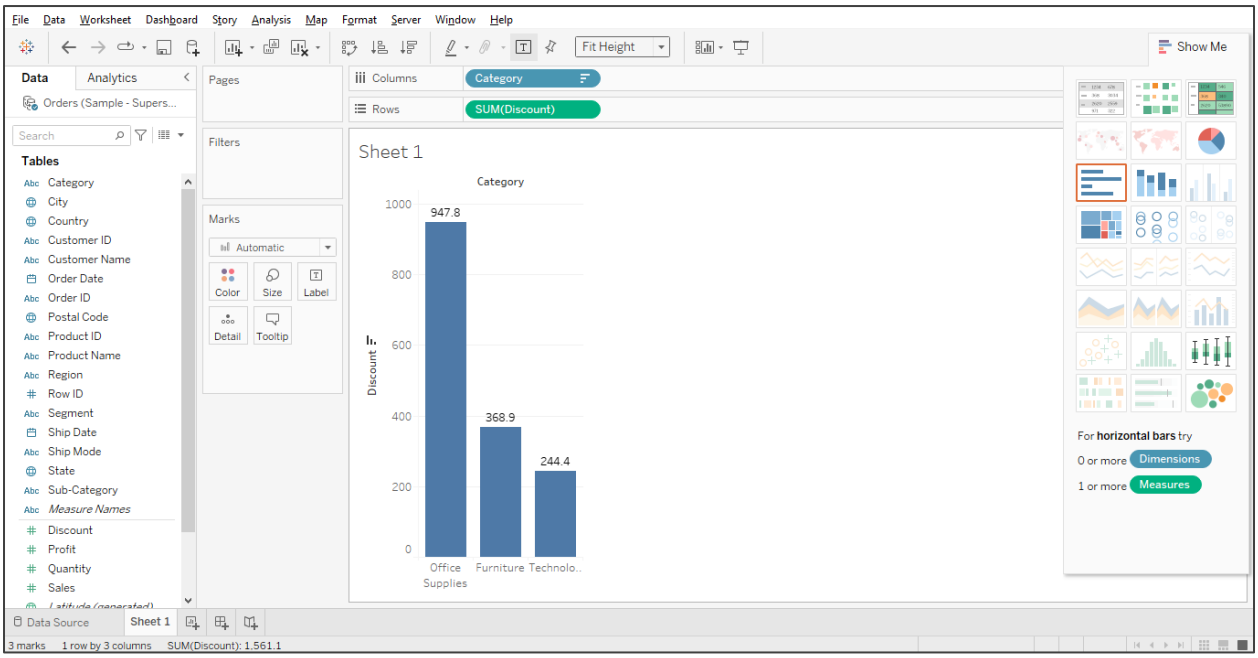
9.1 Click on the drop-down that says **Standard**



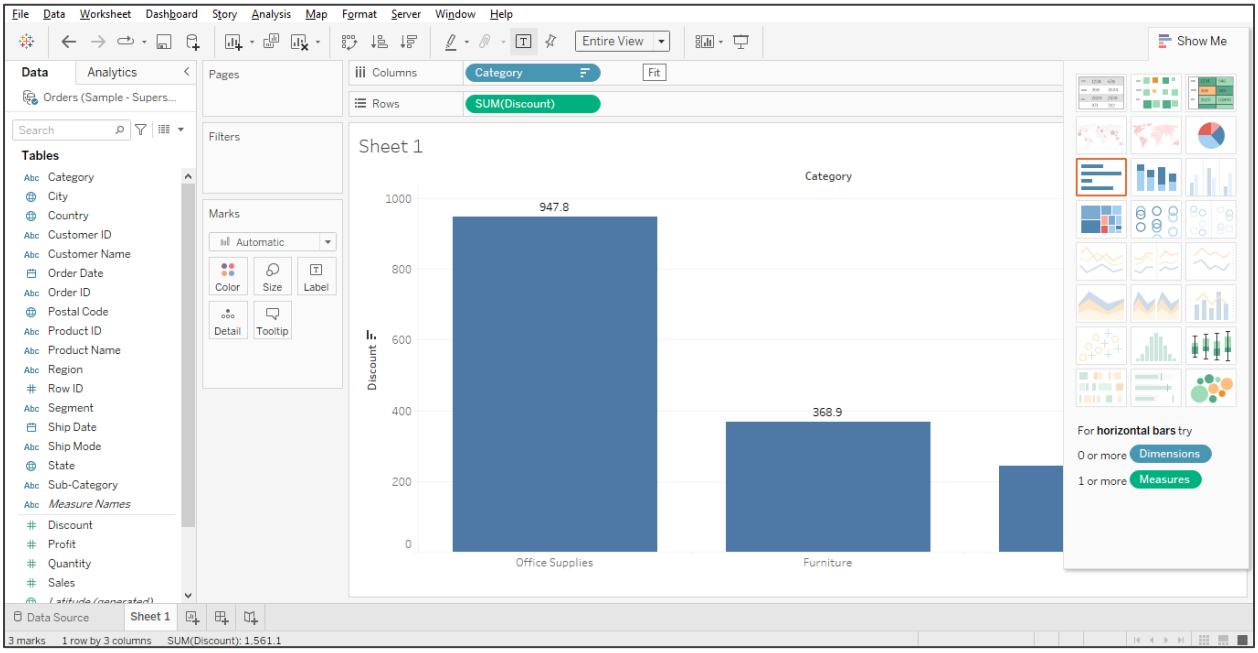
9.2 If you choose **Fit Width,** it will show the following output:



9.3 If you choose **Fit Height**, it will show the following output:

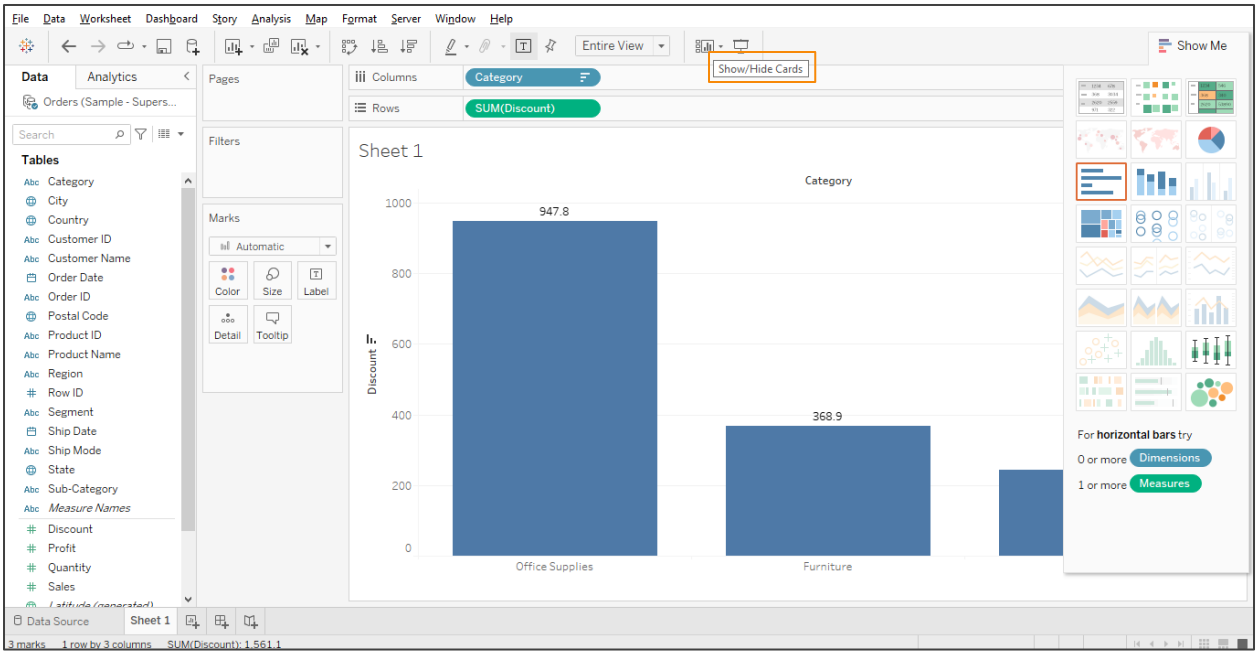


9.4 If you choose Entire View, it will show the entire view, spanning through the canvas

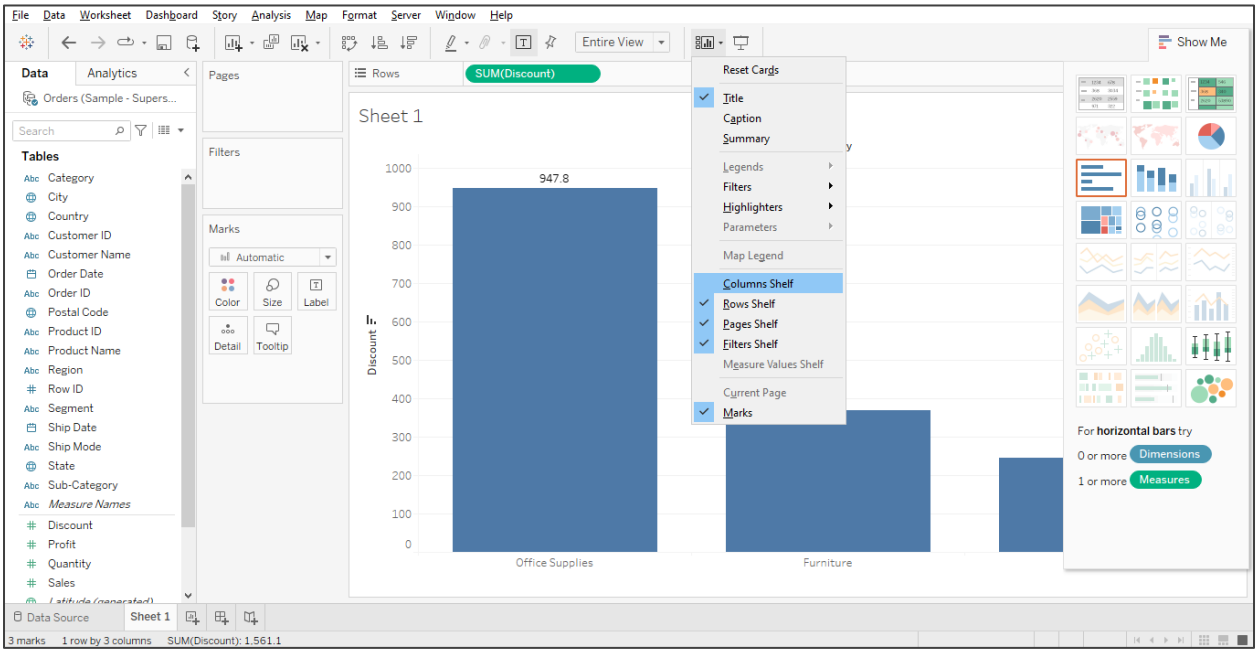


Step 10: Explore the Show/Hide Cards option

10.1 Click on the **Show/Hide Cards** button

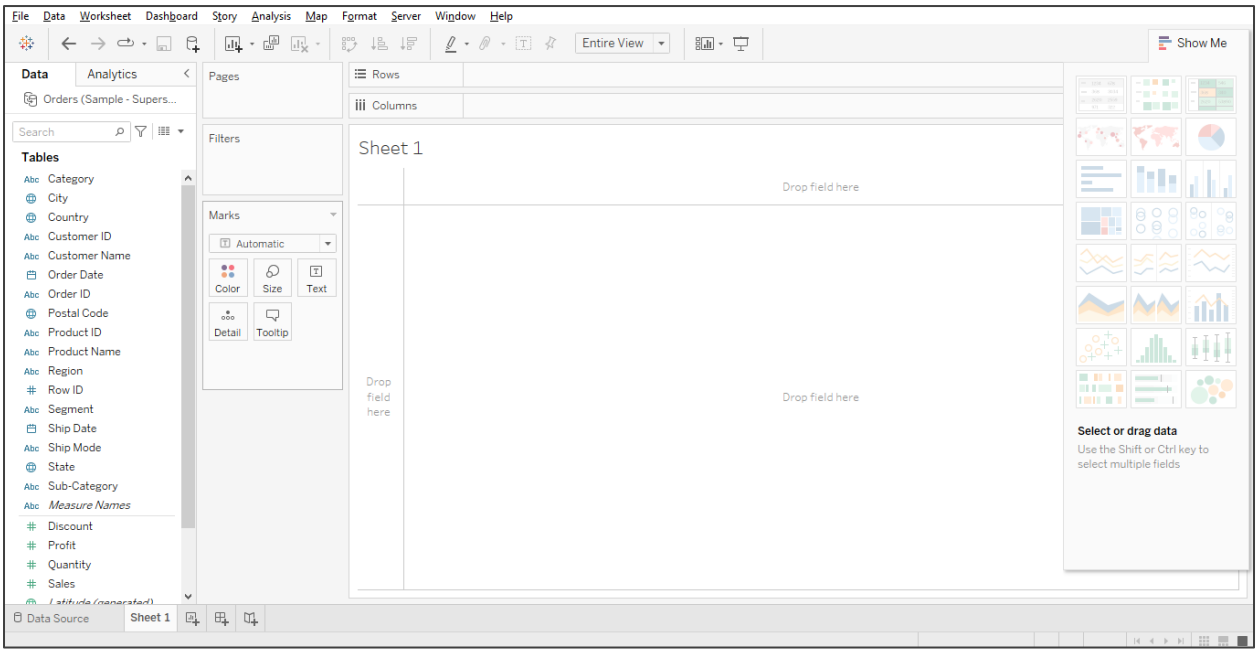


10.2 Uncheck the **Columns Shelf**. Now, you can only see the **Rows Shelf** and the **Columns Shelf** will be hidden.

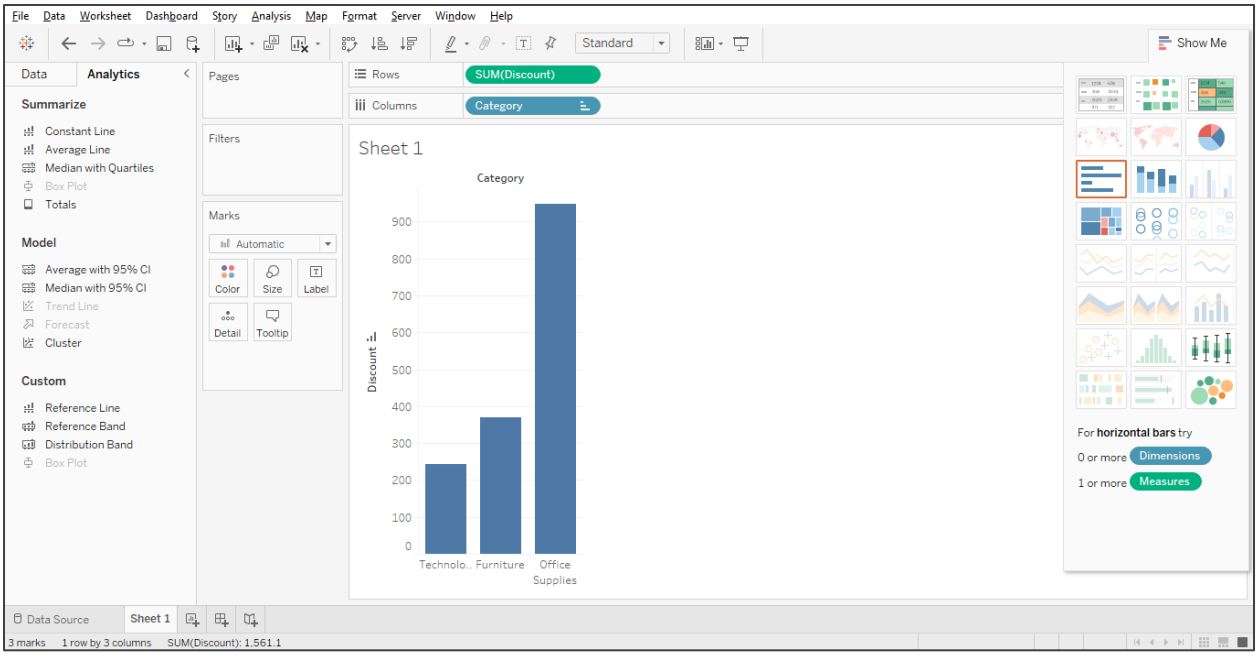


Step 11: Explore the sidebar

11.1 The sidebar, as shown in the screenshot, contains the **Data** and the **Analytics** panes. In the **Data** pane, you can see Tableau's connection with the Excel sheet. You can also see the different columns present in the table.

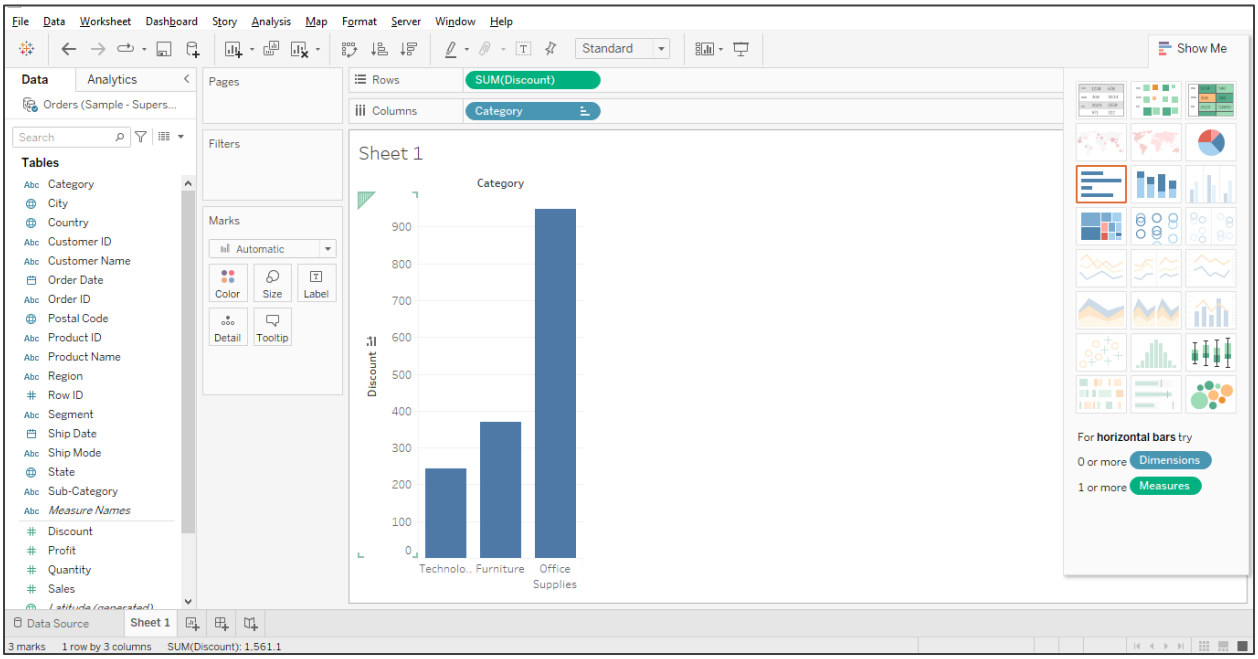


11.2 Observe the **Analytics** pane, which gives you different analytical functions where we can draw the average line, median, quartiles, clustering, and average confidence interval.

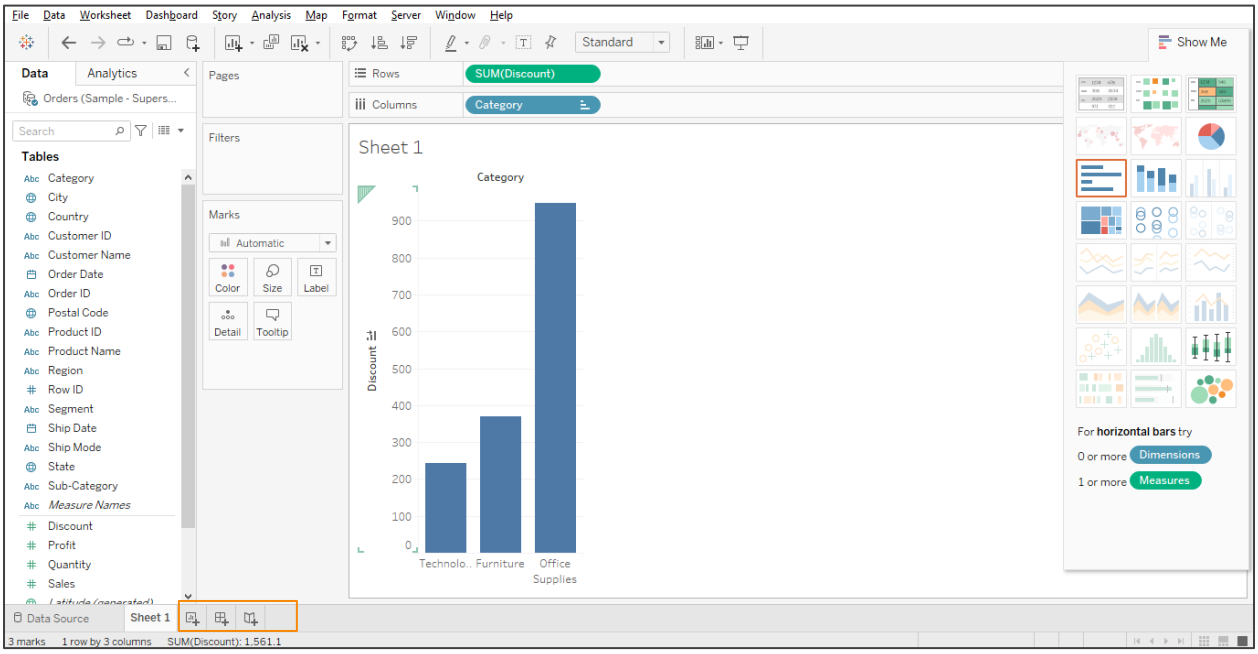


Step 12: Observe the sheets tab

12.1 The sheets tab is located at the bottom of the screen.



12.2 You can click and get a **New Worksheet,** a **New Dashboard,** and a **New Story** by clicking the highlighted buttons, respectively.



With these steps, you can efficiently import, modify, and visualize data from various file types in Tableau.