Difference

Difference, as the name suggests, is used to calculate the difference of a measure across a specific dimension or table structure from its previous value. Often, you may need to analyze how individual categories compare with their past performances, i.e. comparing product sales from previous quarters. Continuing with the car manufacturer example, a common scenario to apply this calculation, would be to compare the sales for the months of a year. This allows you to find out whether the total sales are greater or fewer, compared to the previous months. In the following exercise, you will learn how to apply a **Difference** table calculation to a worksheet.

Exercise 02: Creating a Difference Calculation

In this exercise, you will calculate the profit difference across years for a category. This will help you analyze whether that category is profitable or not:

1. Load the **Sample – Superstore** dataset in your Tableau instance.
2. Create a view that shows **Category** against **YEAR(Order Date)** and **SUM(Profit)**, as follows:
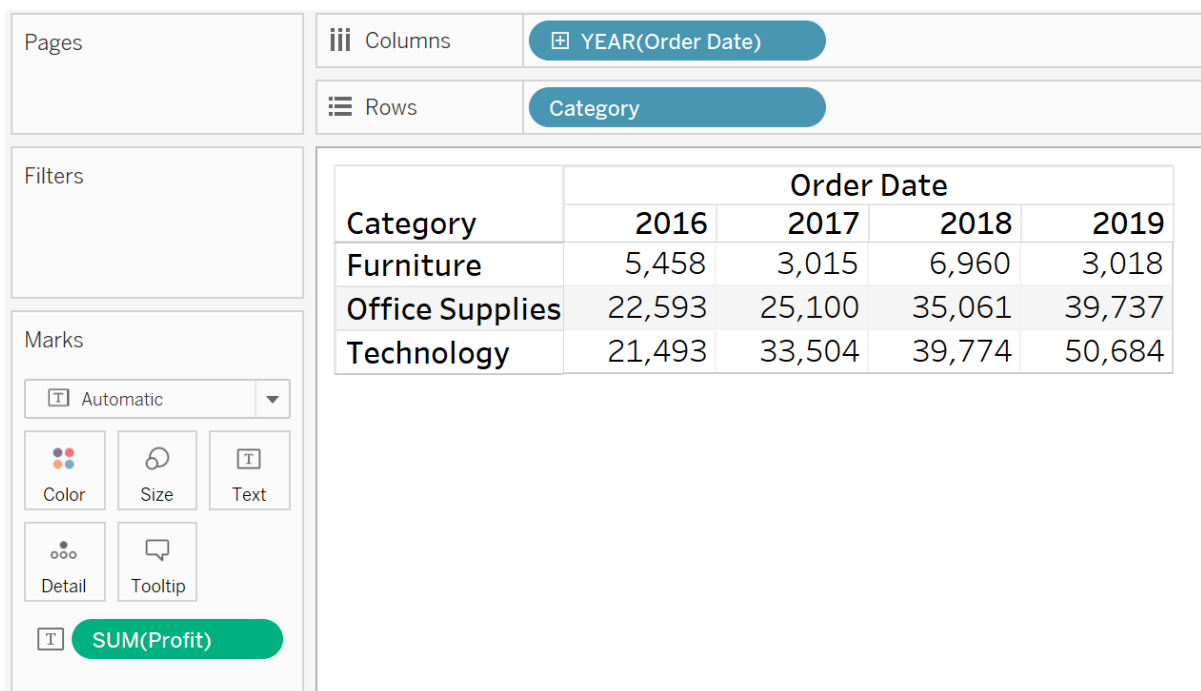
Pages		
Columns	⊞ YEAR(Order Date)	
Rows	Category	

	Order Date			
Category	2016	2017	2018	2019
Furniture	5,458	3,015	6,960	3,018
Office Supplies	22,593	25,100	35,061	39,737
Technology	21,493	33,504	39,774	50,684

Marks

☐ Automatic ▼

Color　Size　Text

Detail　Tooltip

T SUM(Profit)

Figure 1: Initial view

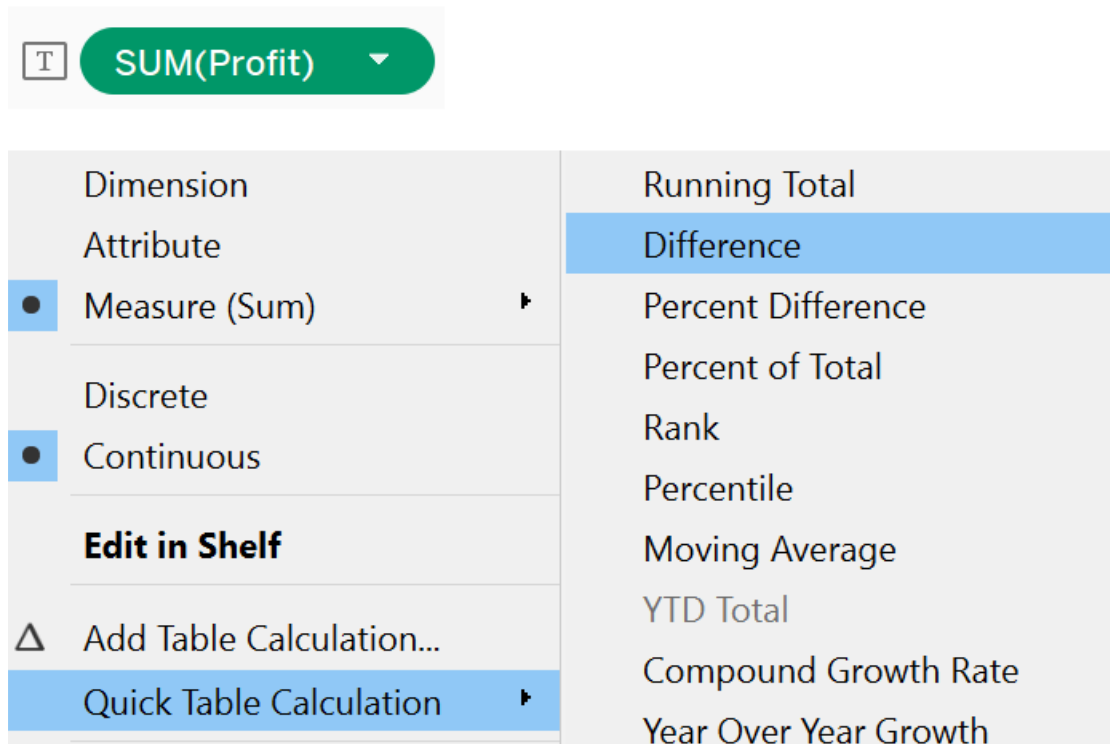3. Add the **Difference** quick calculation to the view, as shown in the following figure:

Figure 2: Accessing quick table calculation difference

The final view will be as follows:

Category	2016	2017	2018	2019
Furniture		-2,443	3,945	-3,942
Office Supplies		2,506	9,962	4,675
Technology		12,011	6,270	10,910

Figure 3: Final output

As you can see, the result is the difference between the current year's profit and the previous year's profit; for example, for **Furniture**, the second value under **Difference** is computed using the previous value and the current value, that is,

3,015 – 5,458 = -2443. This is done similarly for the other categories. One thing to note here is the first year's value will always be blank, as there is nothing to compute the difference from.