Lesson 08 Demo 03
Aggregation and Granularity

Objective: To use aggregation and granularity to analyze the sales and profit of different categories

Tools required: Tableau Desktop

Prerequisites: None

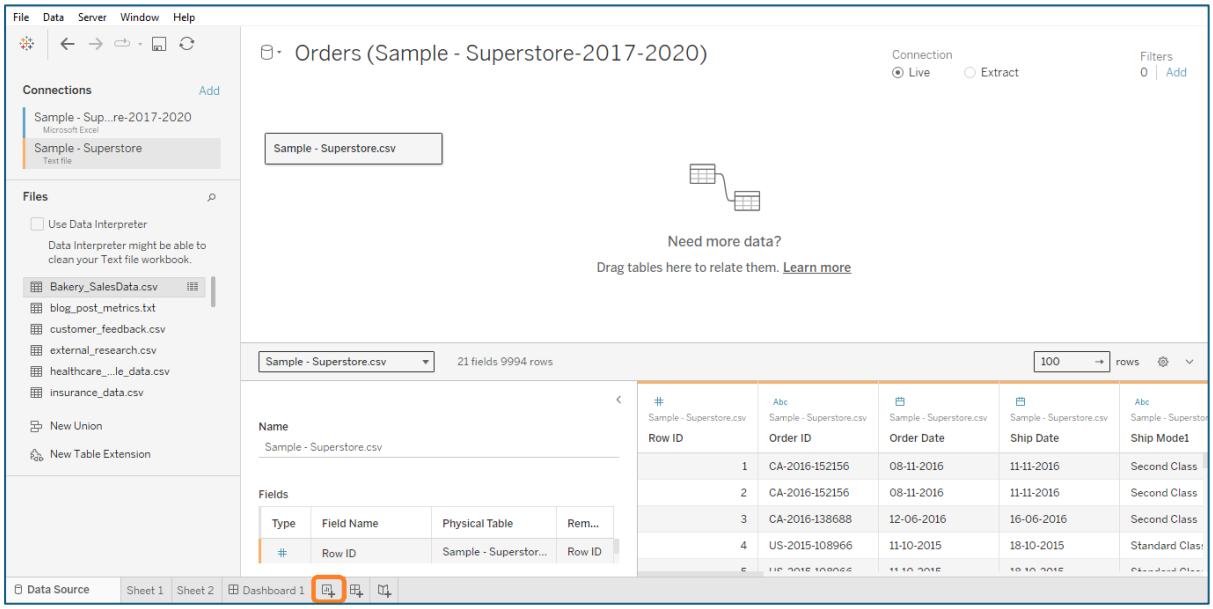
Note: Download the **Sample – Superstore.csv** dataset from the Reference Materials section of the LMS

Steps to be followed:

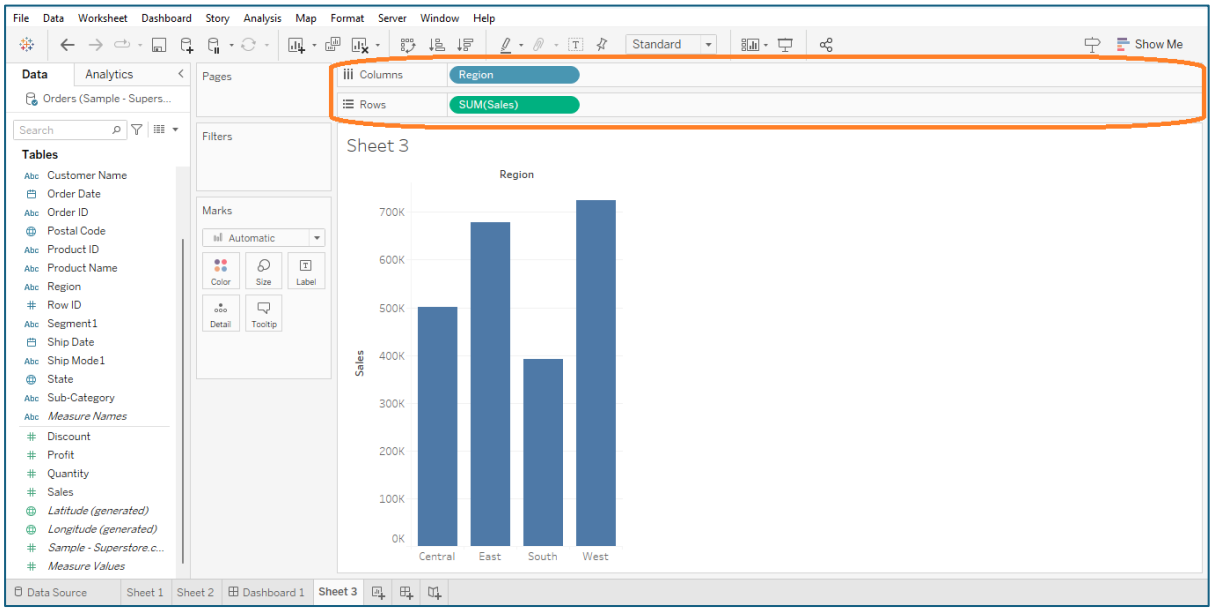
1. Use aggregation for measure
2. Use aggregation for dimension
3. Use granularity

Step 1: Use aggregation for measure

1.1 Open a new worksheet

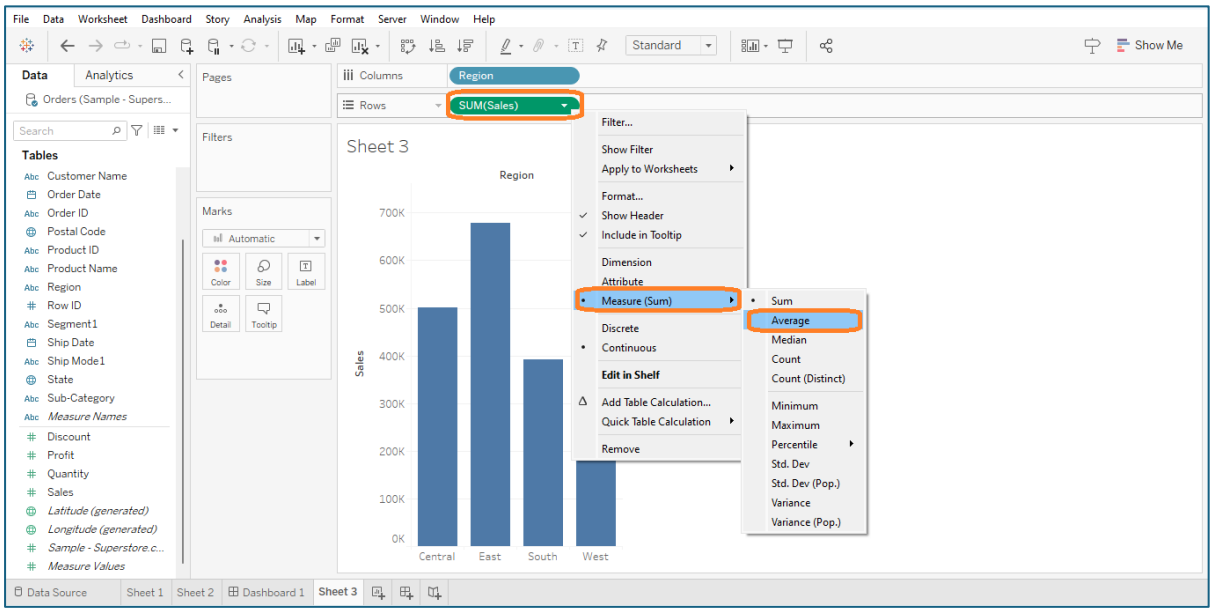


1.2 Drag the **Sales** dimension to the rows field and the **Region** dimension to the column field

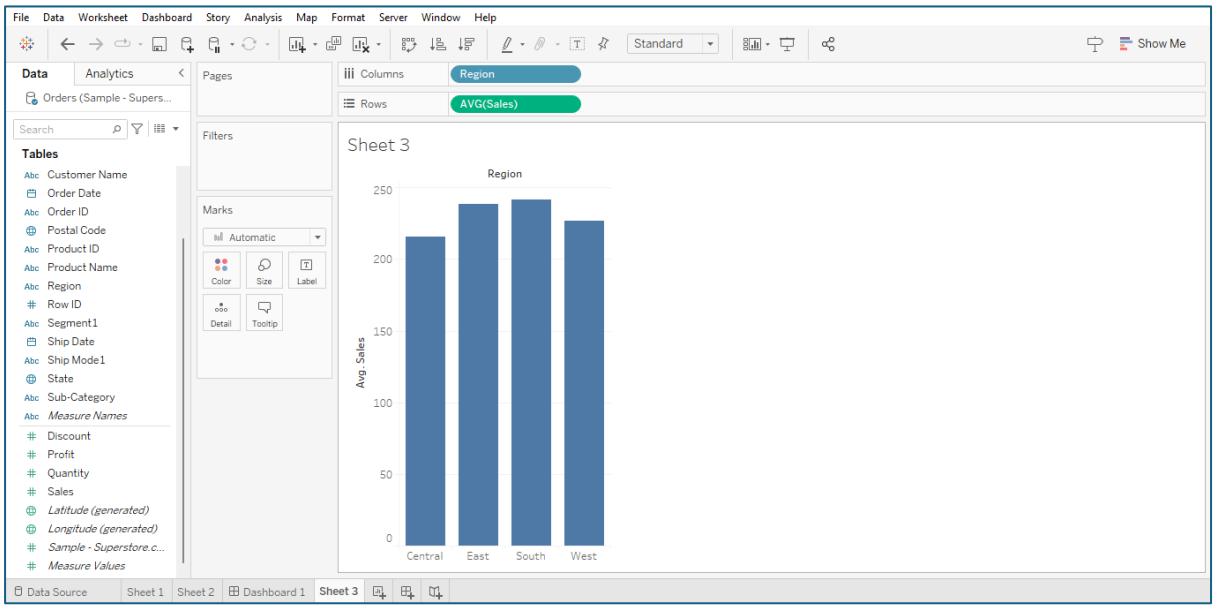


Note: For Measures, a default aggregation gets added to the field as a SUM. However, you can always change the aggregation by right-clicking and selecting a different aggregation. This is shown below.

1.3 Apply the **Average** aggregation by right-clicking on **Sales**, select **Measure**, and then click on **Average**

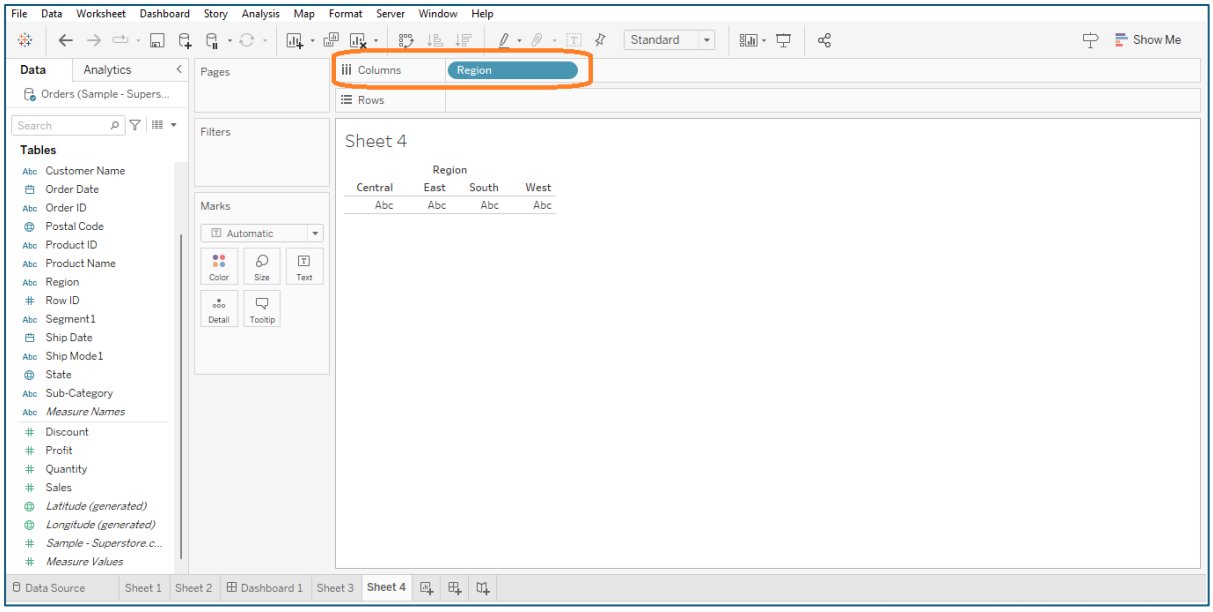


The output will look like:

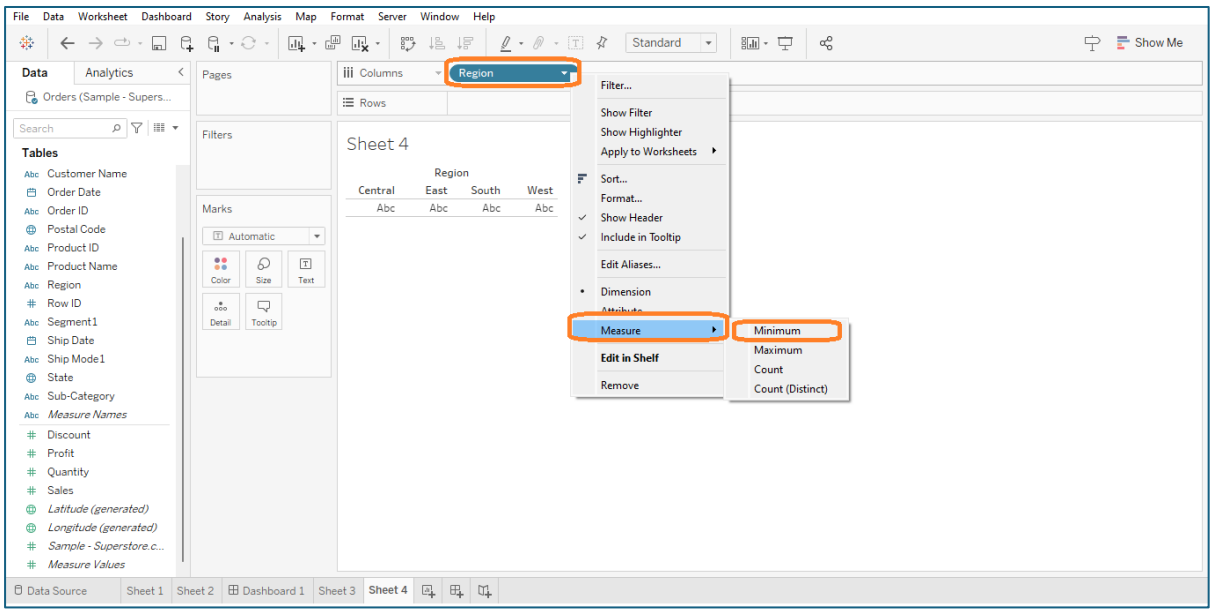


Step 2: Aggregation for dimension

2.1 Open a new sheet and bring the **Region** dimension to the Column field

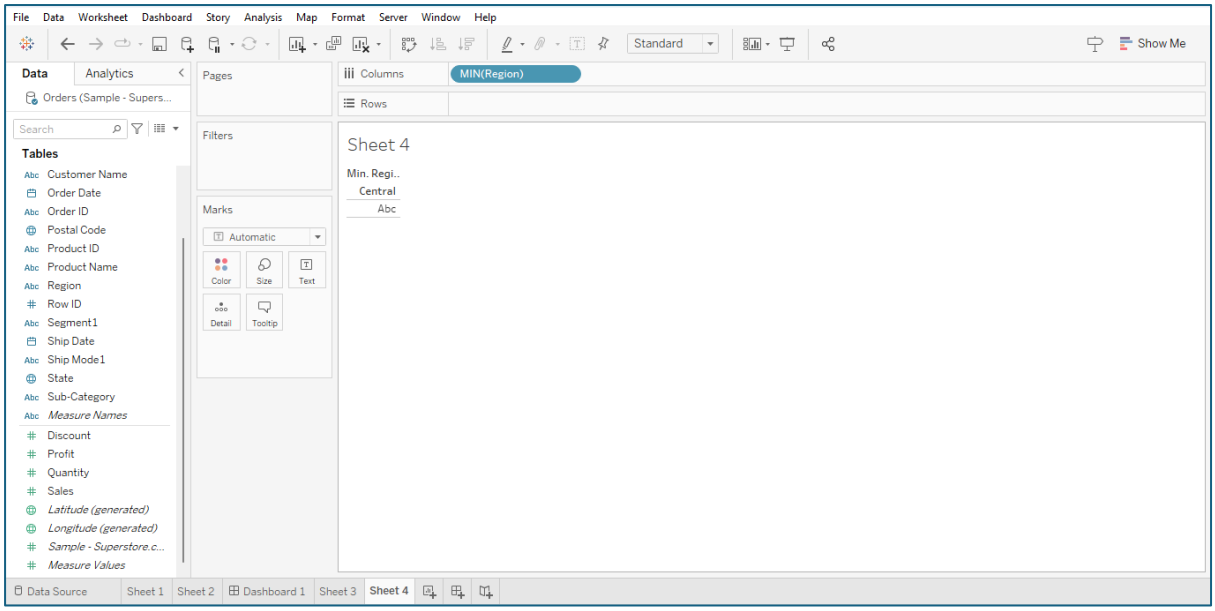


2.2 Right-click on the **Region** dimension, choose **Measure**, and select **Minimum**

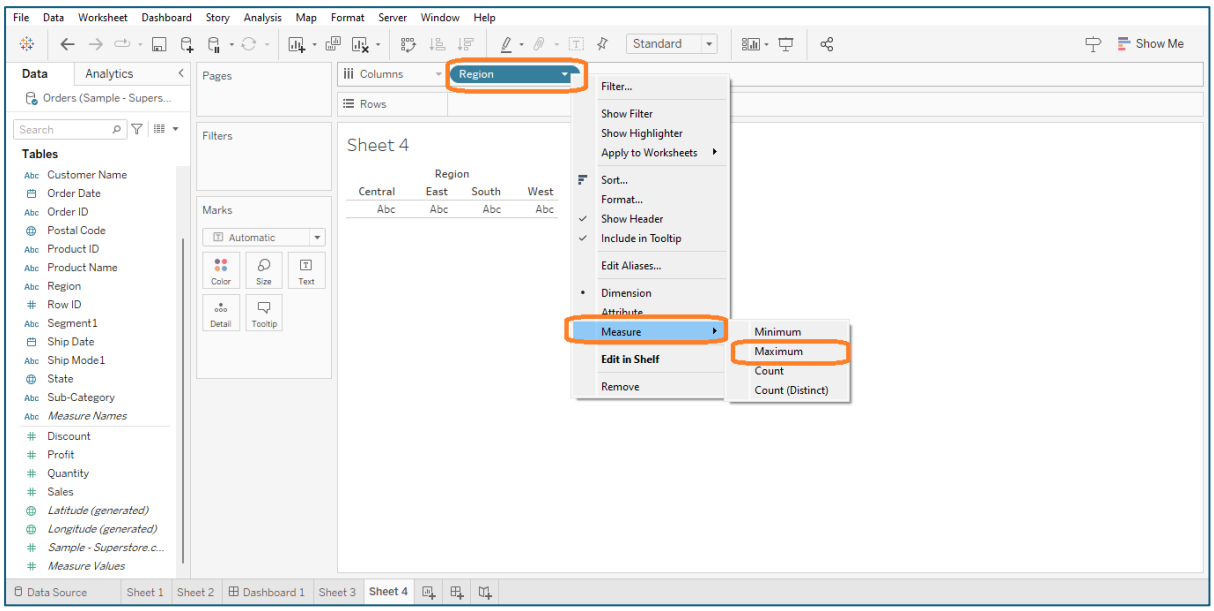


Note: Minimum Aggregation will provide the name of the Region that appears at the end when ordered alphabetically.

The output will look like:

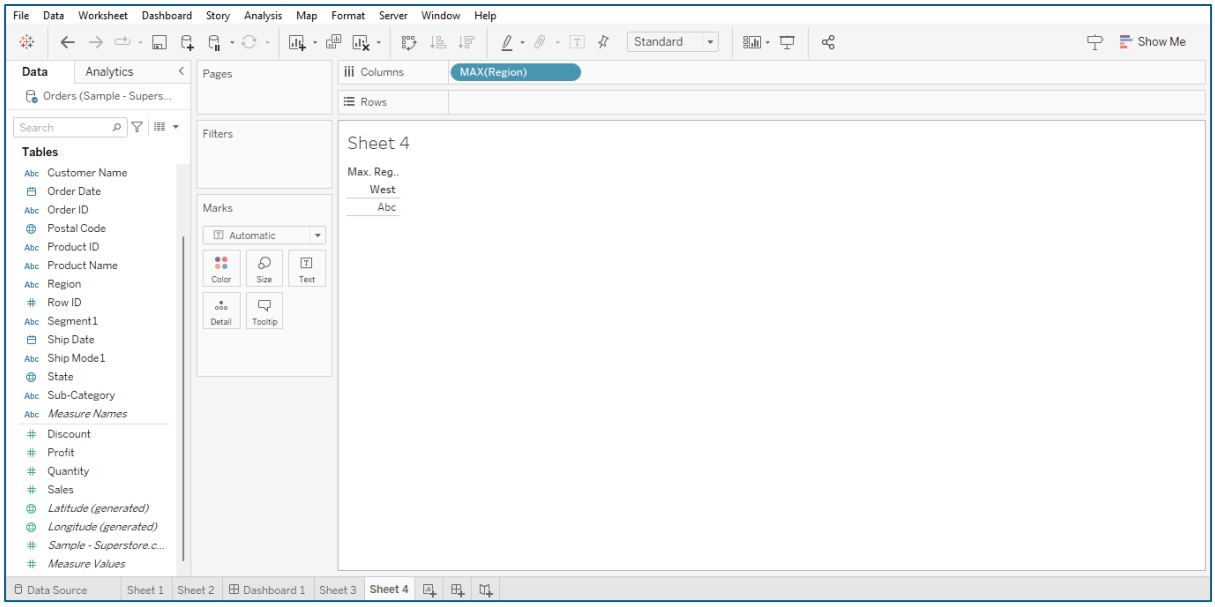


2.3 Right-click on the **Region** dimension, choose **Measure**, and select **Maximum**

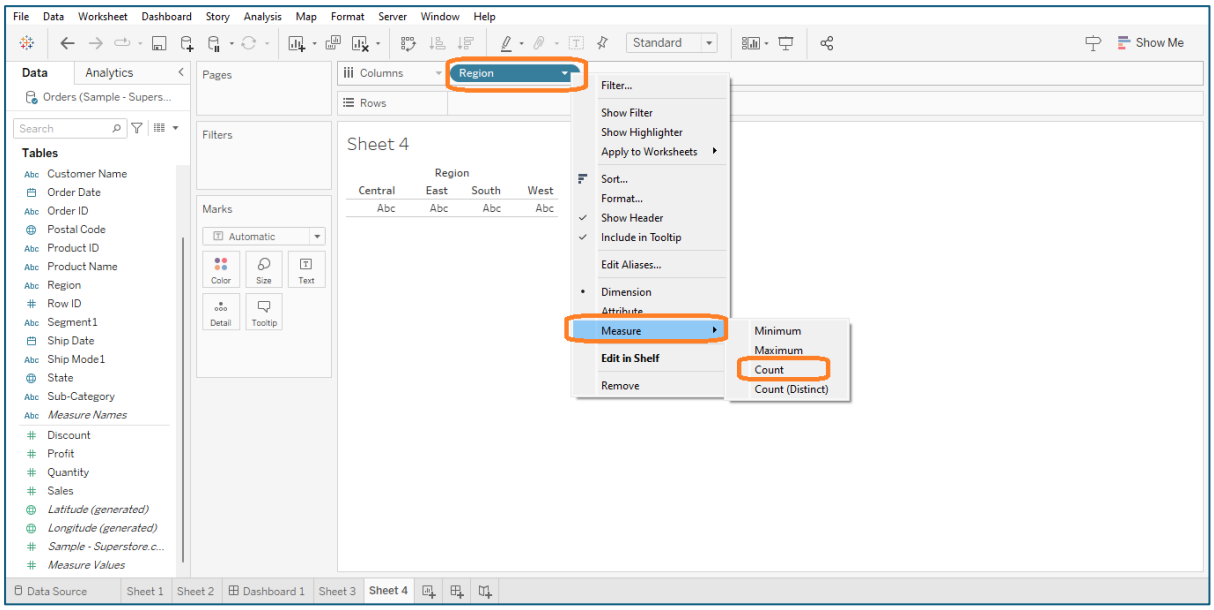


Note: Maximum Aggregation will provide the name of the last Region that appears when ordered alphabetically.

The output will look like:

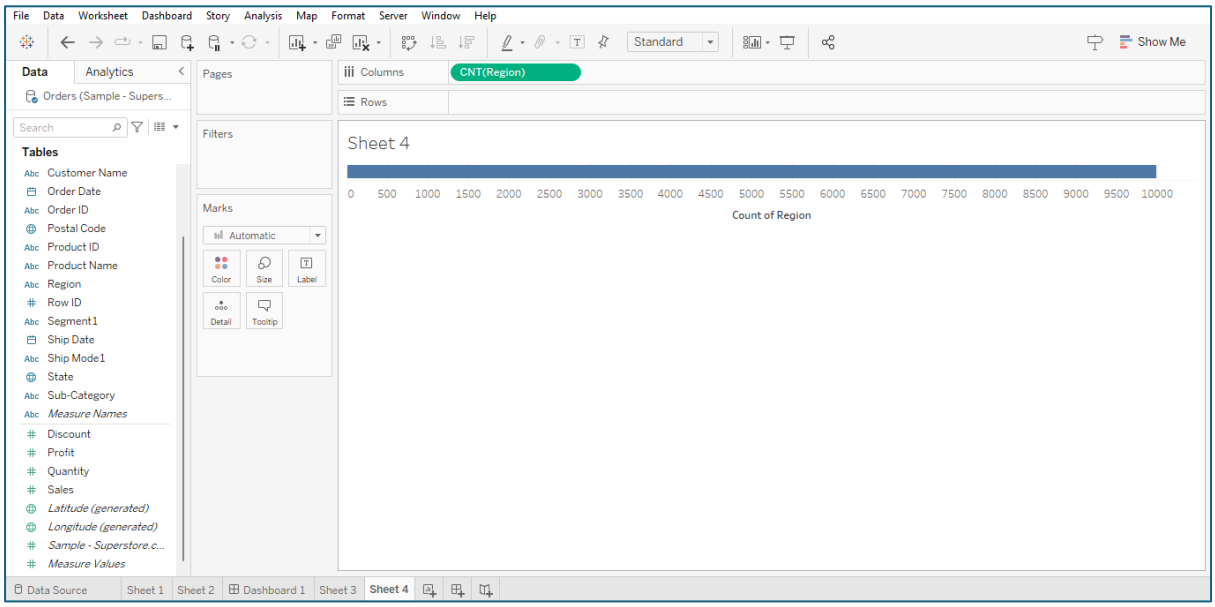


2.4 Right-click on the **Region** dimension, choose **Measure**, and select **Count**

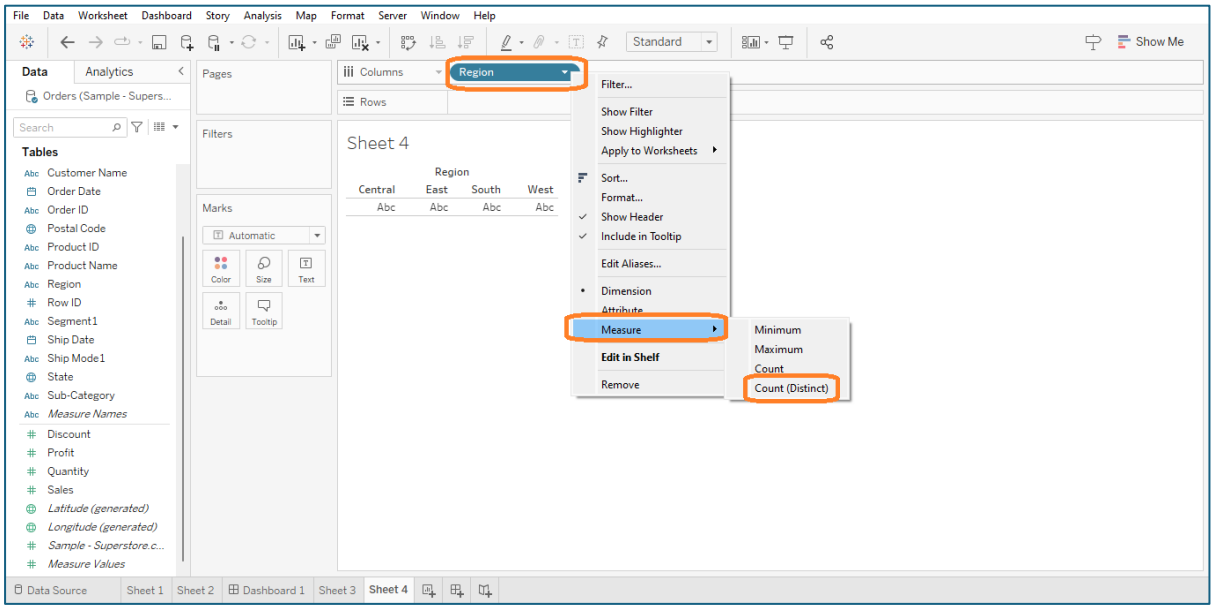


Note: Count Aggregation applied to a dimension will count the instances of the Region dimension appearing in the data. Since it will throw a numeric data point, the Region pill will be turned to green, and a default bar chart will be created.

The output will look like:

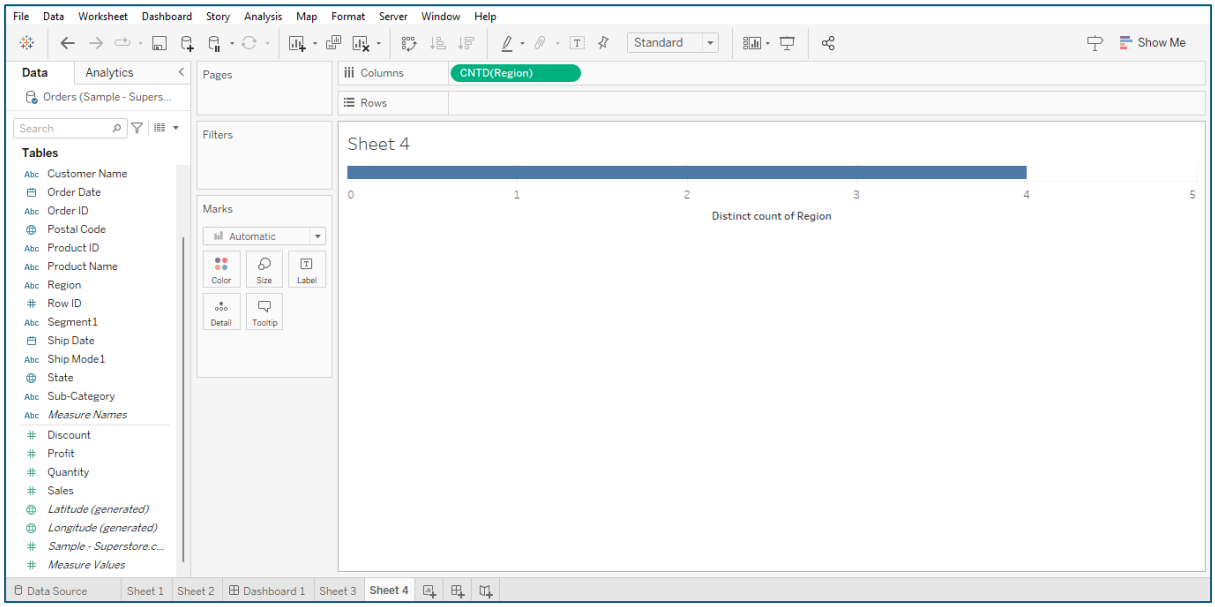


2.5 Right-click on **Region**, choose **Measure,** and select **Count (Distinct)**



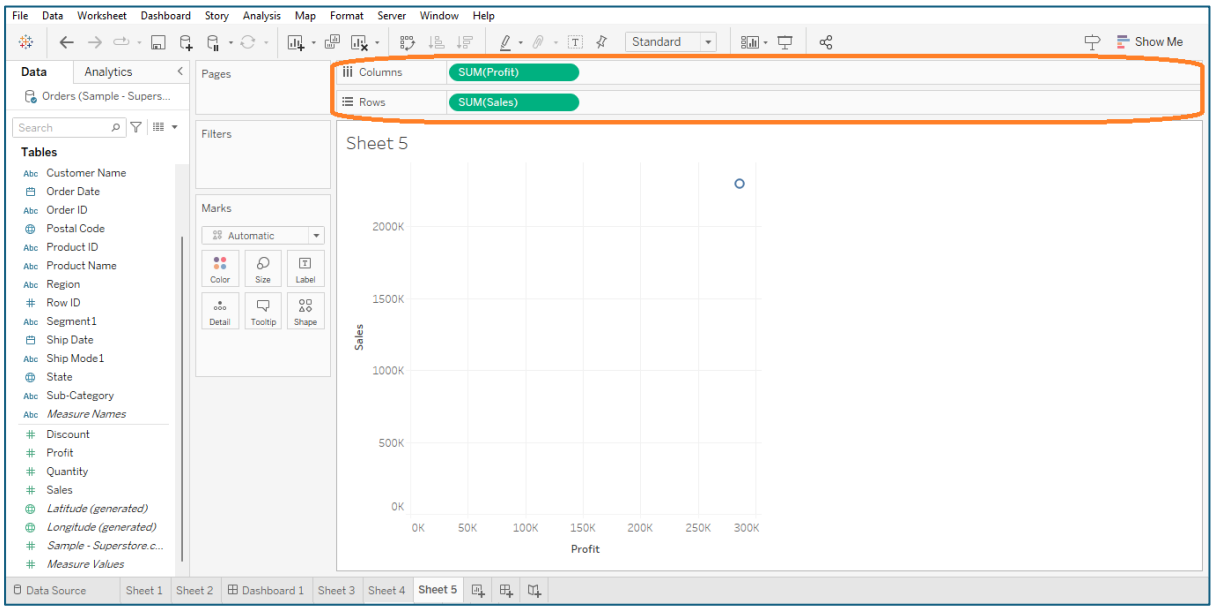
Note: Applying Count (Distinct) Aggregation to the Region dimension will count the distinct values of the Region dimension, turn the Region pill into Green (as it will throw a numeric value), and create a bar chart by default.

The output will look like:

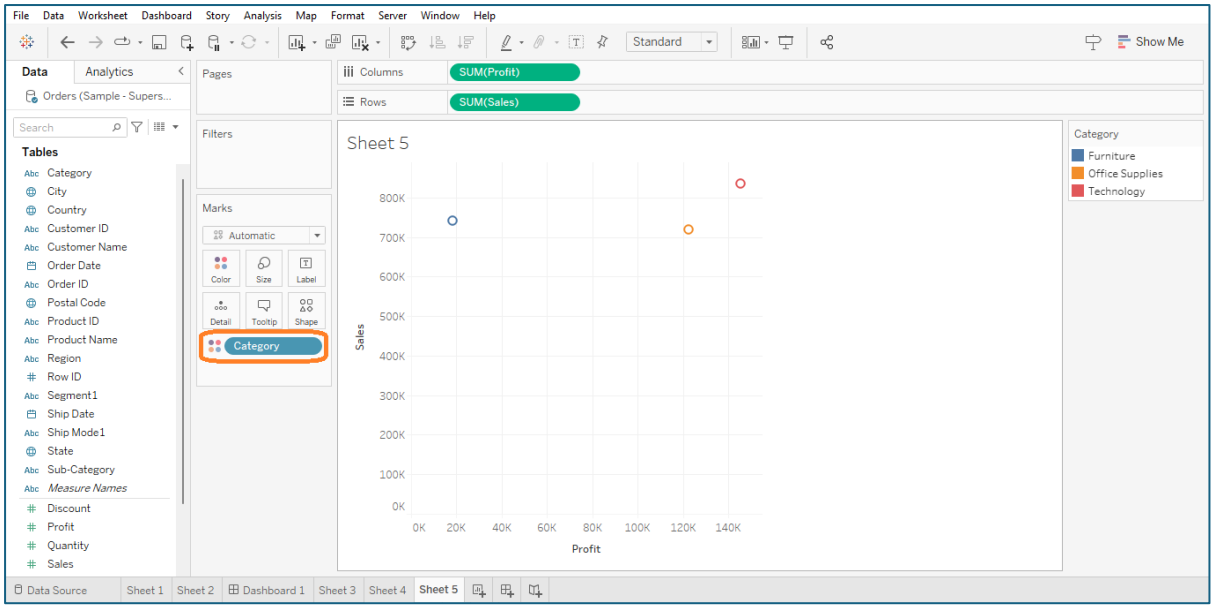


Step 3: Use Granularity

3.1 Open a new sheet and drag **Profits** to rows and **Sales** to columns



3.2 Drag **Category** to **color** or detail marks, and then the output will look like:



Note: Color, Size, Details, Shape, and Label Marks (except for Tool tips) impact the Granularity of the data in Tableau. Also, any inclusion and exclusion of a dimension in Rows and Columns shelf also impacts the level of Granularity.

With these steps, you have successfully used Aggregation and Granularity in Tableau to analyze sales and profit of different categories.