

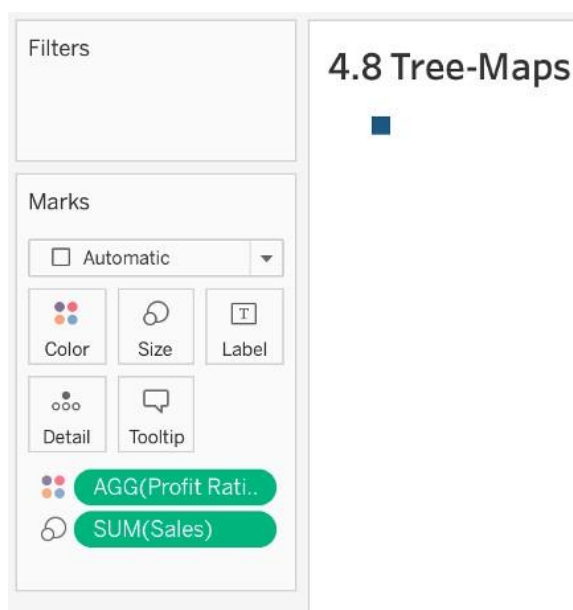


## EXERCISE 07: Creating Treemaps

As an analyst, you want to create a view of profitable versus non-profitable states by category without using a cross-table in your view. For this exercise, you will use the **Superstore** dataset. You are required to color-code the states based on their profitability and sort the states in descending order based on total sales. The reason you are using treemaps for this is that you can use both size and color to convey information without sacrificing anything.

Perform the following steps to complete the exercise:

1. Open the sample **Superstore** dataset if it's not already open in your Tableau instance.
2. For this exercise, you have two measures: **Sales** and **Profit Ratio**. You will use **Sales** for sizing and **Profit Ratio** for coloring the treemap. Drag the primary measure (in this case, **Sales**) to the **Size Marks** card and the secondary metric, **Profit Ratio**, to the **Color Marks** card:

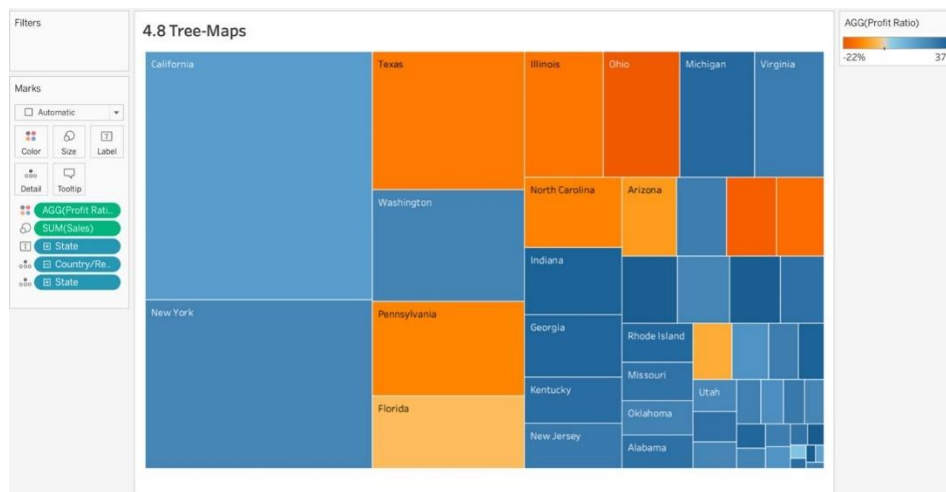


### NOTE

If you are using a version of Tableau later than 2020.1, you may need to choose **Profit** rather than **Profit Ratio** for this step.

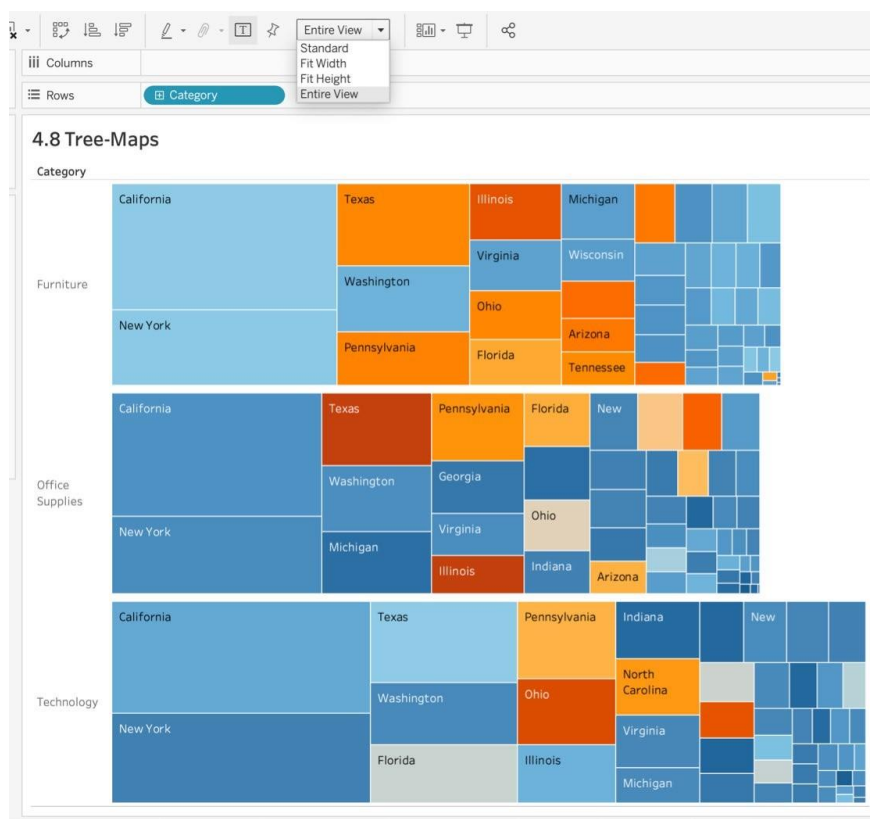
3. Drag **State** to your **Detail Marks** card as it will make your data more granular and represent the states with sizes and colors.

When you add **State** to the **Detail Marks** card (in Tableau version 2020.1), you will see that **Country/Region** is automatically added as **State** is part of the hierarchy. Remove **Country/Region** from the **Detail Marks** card because it is not adding any value or detail to your view. While you are at it, drag **State** as a label:



In the preceding figure, you have represented sales and profit ratios by states. California and New York have the largest number of sales (larger rectangles means more sales), but states such as Michigan have higher profit ratios (darker blue means higher profits).

- You could potentially stop the analysis/charting here, and this would be your treemap representing sales by each state and their profit ratios. However, in this case, you'll add another layer of detail to your view. Drag **Category** to the **Rows** shelf, and in the toolbar, change the view from **Standard** to **Entire View**, as shown in the following screenshot:





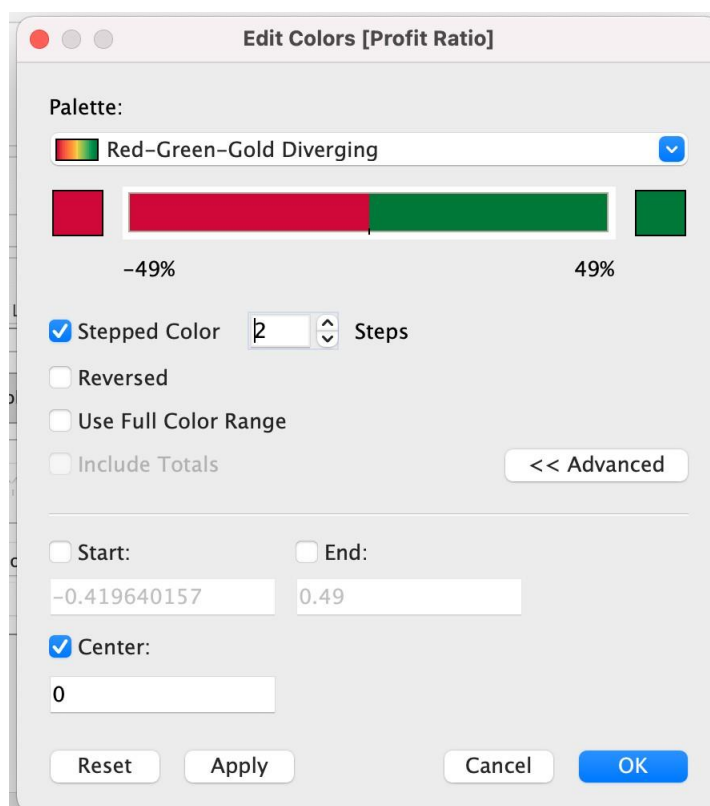
You are just about finished, but the color range that you have used in the chart is a bit confusing because the stakeholders just want to know whether a state was profitable or not. They neither need nor want to know the exact profit or loss ratio for each of the states. You can add those exact **Profit ratio** details in a tooltip later.

5. Navigate to the **Marks** card and click on the **Color** tab. Check the **Stepped color** checkbox and enter its value as **2** steps.

#### NOTE

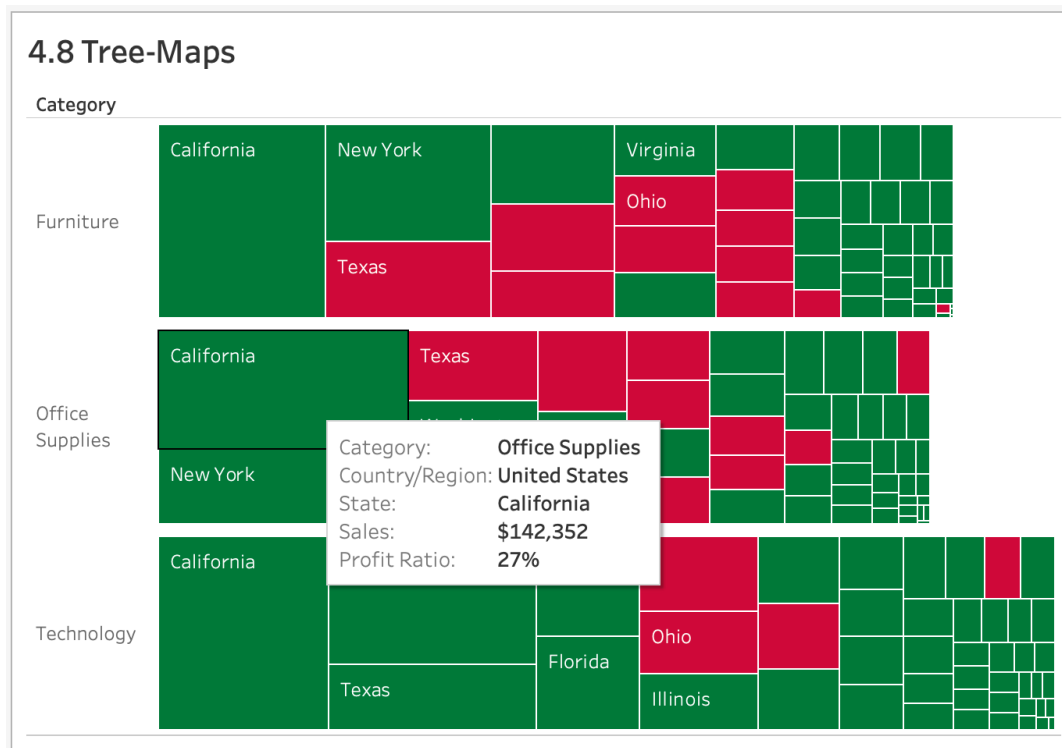
If you are using a version of Tableau later than 2020.1, you will need to select **Edit Colors** to find the **Stepped color** option.

6. Next, select the palette you want and click on **<< Advanced**. Check the **Center** checkbox and enter its value as **0** (green represents a profitable state):





The final output is as follows:



The main difference between the last two treemaps is that in the latest treemap, instead of color-coding your profit ratio with gradient colors, you color-coded loss as red and profit as green, so it's easier for stakeholders to quickly view the most profitable and least profitable states.

If you look, you can see that California is the highest-selling state across all categories, and if you want to know the profit ratio of the state, all you have to do is hover over any of the states.