

Bar Charts & Stacked Bar Charts

Bar Chart

A Bar Chart represents categorical data with rectangular bars whose heights/lengths are proportional to the value. The bars can be plotted both horizontally and vertically.

- **Pros:** Bar charts help show each data category in a frequency distribution, which helps summarise a large dataset visually because they clarify trends better than Text tables.
- **Cons:** The main problem with bar charts is that they fail to expose key assumptions, causes, impacts, and patterns and can be easily manipulated to give false impressions.

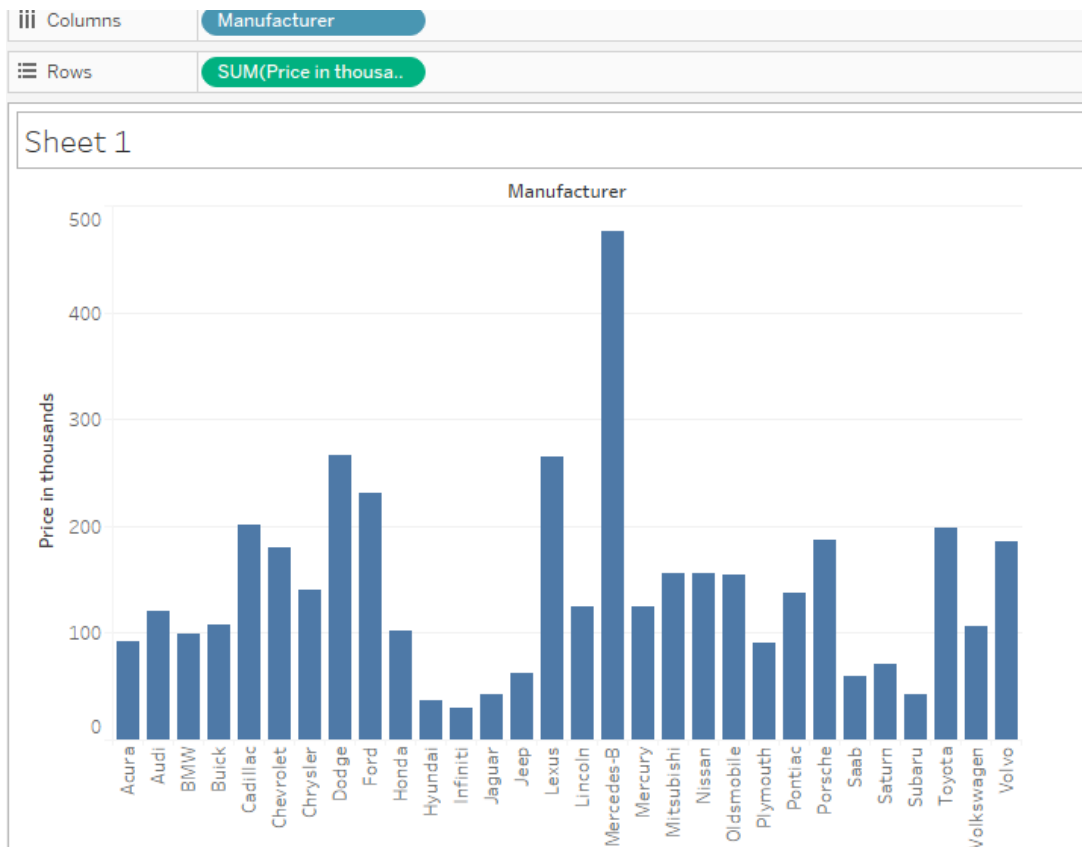
Stacked Bar charts

The stacked bar chart extends the standard bar chart from looking at numeric values across one categorical variable to two. We can use a stacked bar chart to analyse more than one type of information on the same bar.

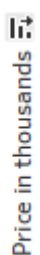
- **Pros:** Stacked bar charts are good for comparison between different variables. Also, they make the data concise and limit it to one final variable for each variable, and everything looks neater.
- **Cons:** Although the information might get concise, it becomes harder to read with each variable addition.

Suppose you want to create a Bar chart for Prices in thousands for Cars of various manufacturer brands.

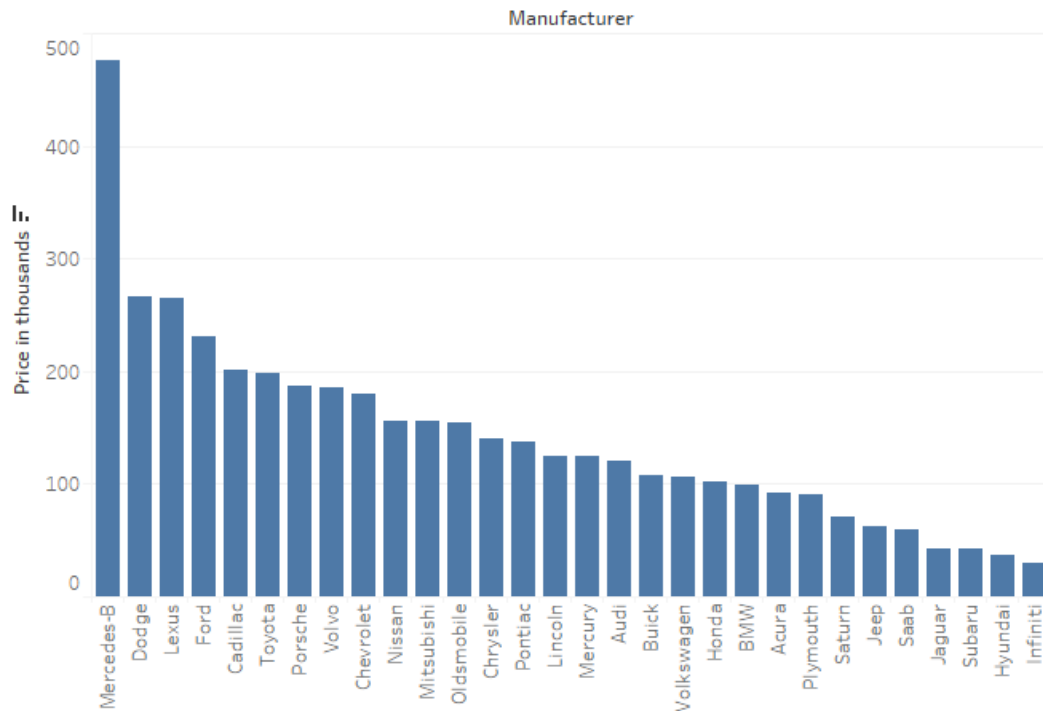
So for that, add Price in thousands in the row and Manufacturer in Column, and we will get the following output in our Tableau screen.



We can also arrange these bars in ascending or descending order of prices by clicking on the icon above the Prices in thousands shown below.

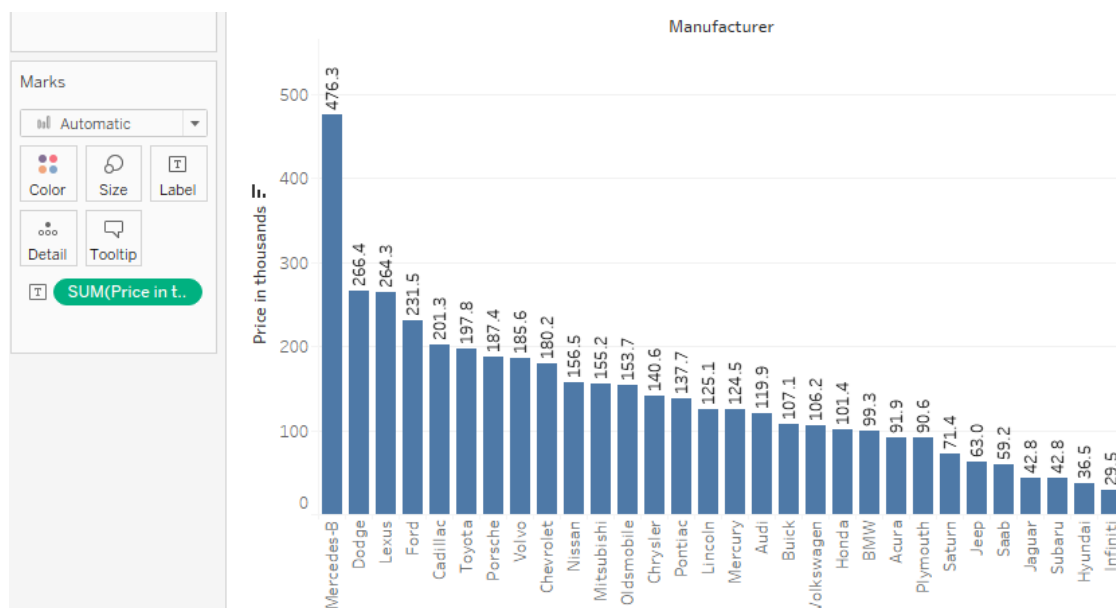


And after clicking this, we get the prices sorted in descending order as shown below:



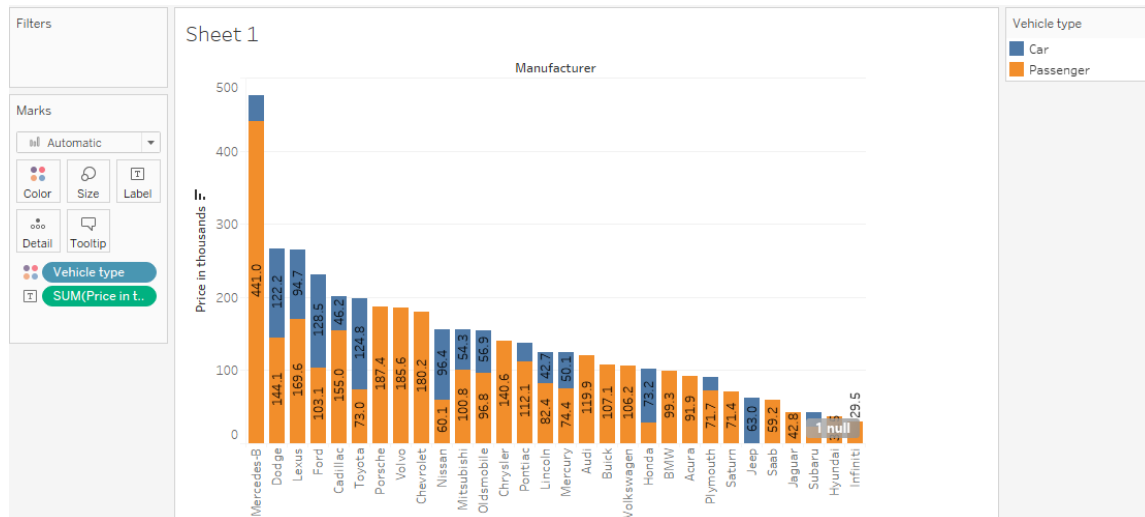
Now we can see that it is difficult to read the Exact Price corresponding to each manufacturer so we will take the help of the Label present in the Marks.

To read Price at the top of each bar, we will drag and drop Price in thousands on the Label. After doing the same, we will get the following output:



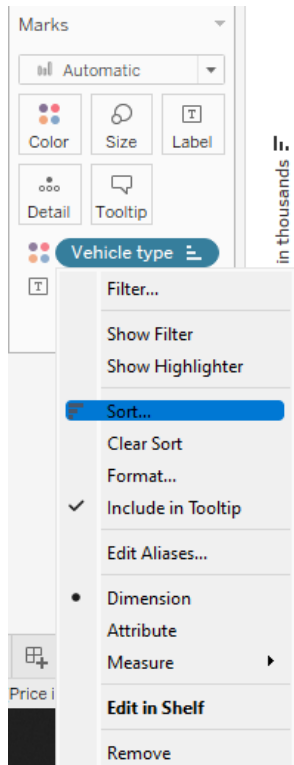
Now suppose we want to get Price by Manufacturer and each bar broken down by contribution from each Vehicle type, So here stacked bar charts come into play.

So for that, we will simply drag and drop Vehicle Type onto the Color in Marks, and we will get our Stacked bar Chart as:

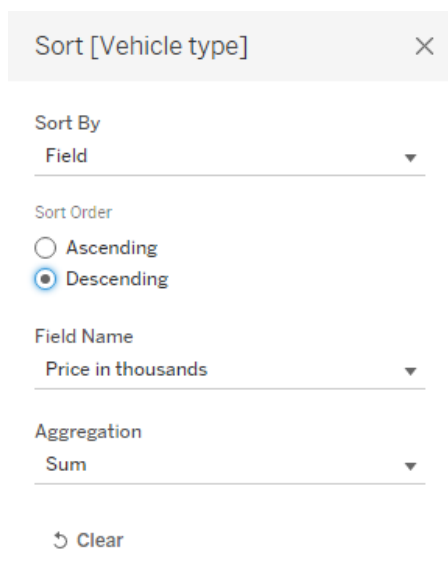


We can see that the Prices have broken down for each Vehicle Type category.

We also can sort these stacked bars in various orders according to our needs. For now, it is sorted in ascending order, but suppose we need to sort them in descending order; then, we can do so by right-clicking on Vehicle in the Marks and selecting Sort as shown below:



We can go on 'Sort By' and select 'Field' and select the 'Sort order' as 'Descending.'



After doing so, we get the Prices arranged in descending order as shown below:

