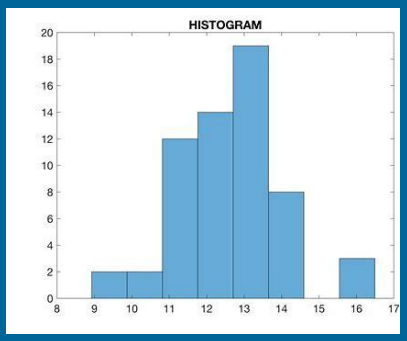
What is a histogram?

A histogram is a chart that plots the distribution of a numeric variable's values as a series of bars. Each bar typically covers a range of numeric values called a bin or class; a bar's height indicates the frequency of data points with a value within the corresponding bin.

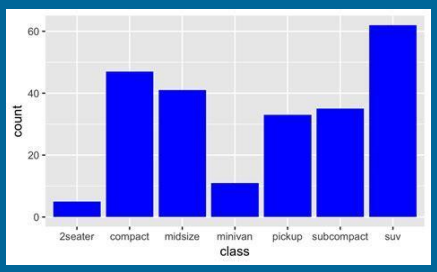


When you should use a histogram ?

Histograms are good for showing general distributional features of dataset variables.

What is a bar chart?

A bar chart (aka bar graph, column chart) plots numeric values for levels of a categorical feature as bars. Levels are plotted on one chart axis, and values are plotted on the other axis. Each categorical value claims one bar, and the length of each bar corresponds to the bar's value. Bars are plotted on a common baseline to allow for easy comparison of values.

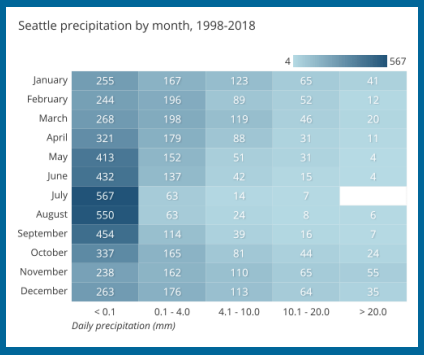


When you should use a bar chart?

A bar chart is used when you want to show a distribution of data points or perform a comparison of metric values across different subgroups of your data.

What is a heatmap?

A heatmap (aka heat map) depicts values for a main variable of interest across two axis variables as a grid of colored squares. The axis variables are divided into ranges like a bar chart or histogram, and each cell's color indicates the value of the main variable in the corresponding cell range.

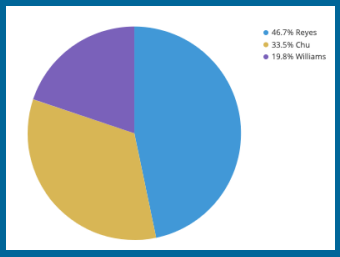


When you should use a heatmap

Heatmaps are used to show relationships between two variables, one plotted on each axis. By observing how cell colors change across each axis, you can observe if there are any patterns in value for one or both variables.

What is a pie chart?

A pie chart shows how a total amount is divided between levels of a categorical variable as a circle divided into radial slices. Each categorical value corresponds with a single slice of the circle, and the size of each slice (both in area and arc length) indicates what proportion of the whole each category level takes.



When you should use a pie chart?

Pie charts have a fairly narrow use-case that is encapsulated particularly well by its definition. In order to use a pie chart, you must have some kind of whole amount that is divided into a number of distinct parts.