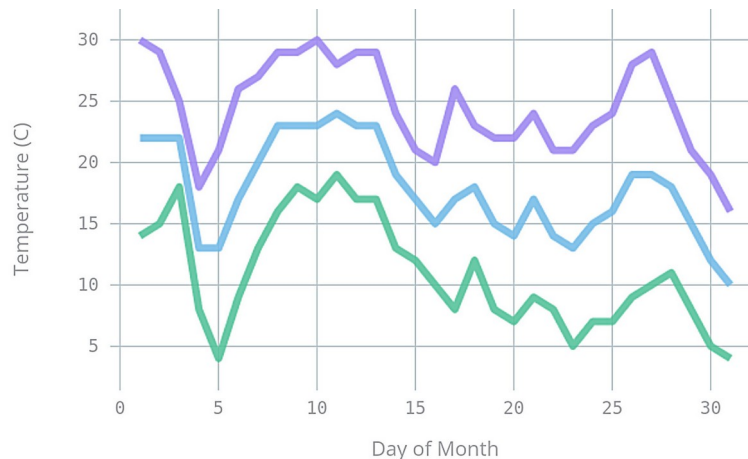


## 2.5 Visualizations

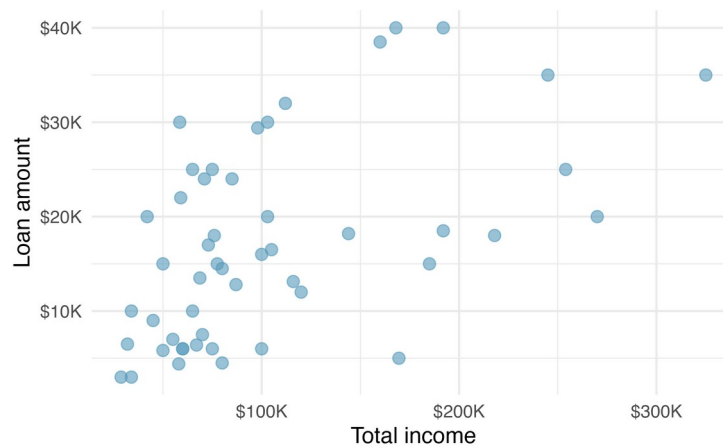
### 2.5.1 Line Chart

It is one of the simplest charts that can be used to display information as a series of data points connected by a line.



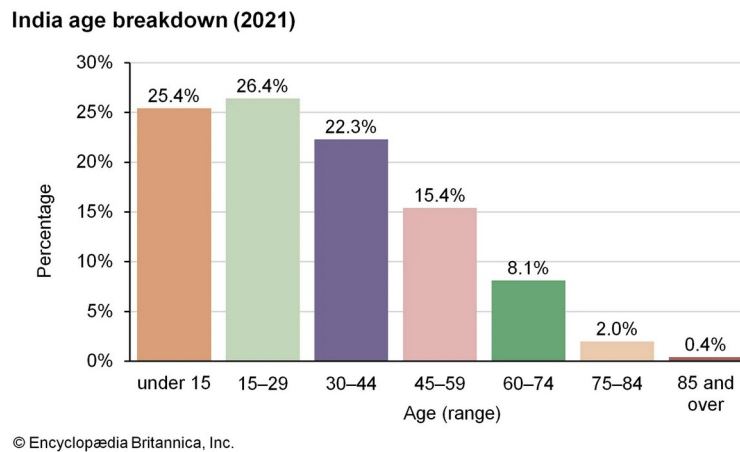
### 2.5.2 Scatter plot for 2D visualization

It can be used to visualize two variables along the X and Y axes. Scatter plots are useful for identifying the relationships between two sets of data, for example fitting a regression line for bivariate data.



### 2.5.3 Bar Chart

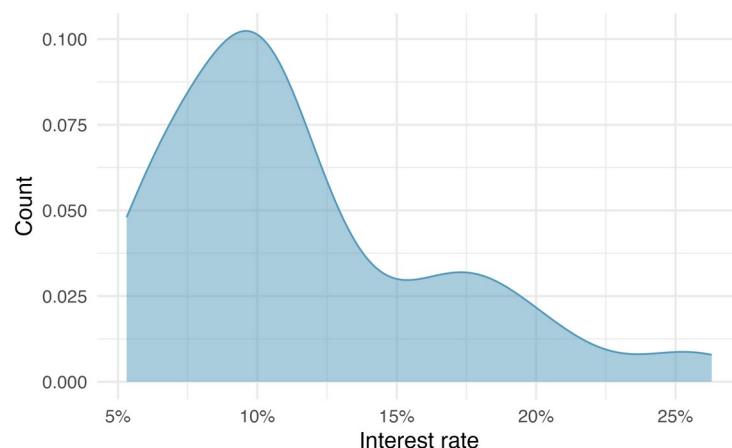
Bar chart can be used to display grouped data as bars with lengths proportional to the values represented. It is popularly used to display histogram of binned counts plotted as bars.



### 2.5.4 Density plot

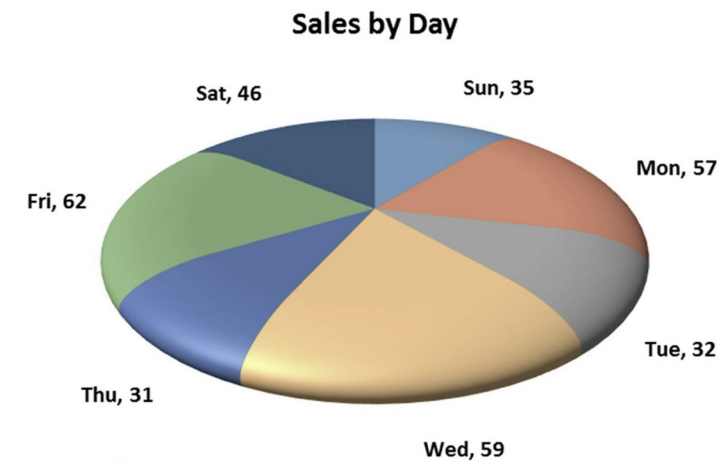
It is a smoothed out version histogram.

Based on number of peaks it can be unimodal, bimodal, and multimodal.



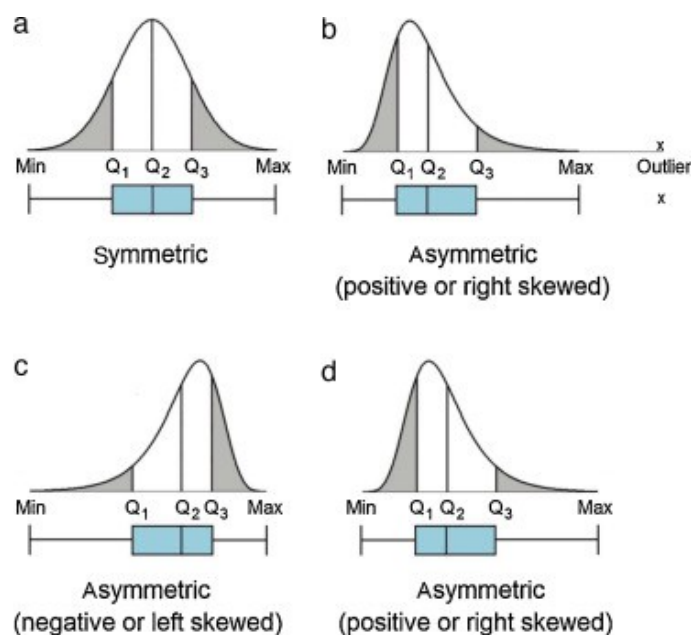
## 2.5.5 Pie Chart

Pie chart is used to display numerical proportions on a circle where the arc length is proportional to the quantity represented.



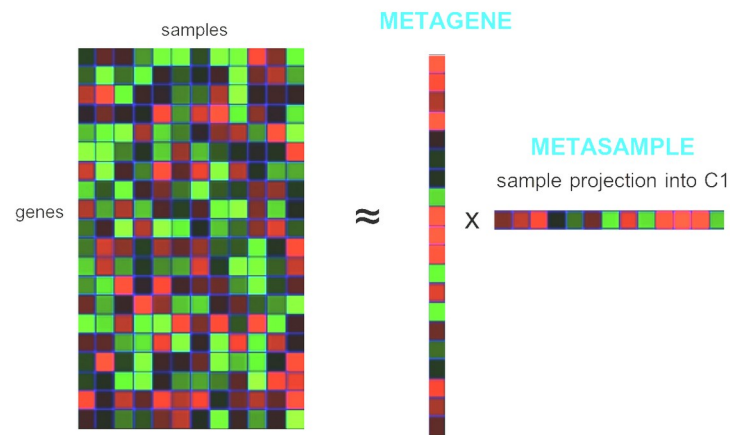
## 2.5.6 Box plot

It is used to display the minimum, medium and maximum for a data set. In a box plot, the whiskers denote the extremes of the dataset and the middle line is the median. The box goes from the first quartile to the third quartile of the data set.



## 2.5.7 Heatmap

It is used to plot a color-encoded matrix.



## 2.5.8 Pair grid

It is used for plotting pairwise relationships in a dataset.

