Visualizing Data

Data Visualization is a graph or picture that helps humans understand important patterns in a dataset.

Visualization Techniques

Data visualizations can be seen everywhere, magazines, advertisements, etc.
Data can be categorical and quantitative.
Categorical data doesn't have a meaningful order. Like pasta, pizza.
Frequency table may become relative by dividing one of the tables by average value and getting this data into a new row (with percentages)
Bar chart displays a lot of information in an easy to understand way.
Pie charts are good to describe one variable, but can't describe 2 and more variables effectively.
Quantitative data has meaningful order (age categories)
Binned frequency table is binned how the creator wants it may not be an accurate data (e.g. hiding 30-39 category like 18-34 and 35-55)
Histograms give more data than tables.
Stem and leaf plots.
Boxplots have a median that splits it by half, but may not be in the center of a box.
Cumulative frequency plot is similar to histogram but has frequency of all points. Looks like a bar chart.