Assignment 2

Standard deviation can be described as a number detailing the average amount of variability within a data set. Variance can be described as a method used to calculate the difference in multiple data sets. While variance is used to find data between multiple groups of data, Standard deviations are used for one specified type of data set. Although these differences are prominent, each has their similarities. For instance, both definitions are used to find a specific variability in any type of data.

The Variance is calculated as the average of the squared differences between each data point and the mean. The squaring of the differences is done to avoid the problem of positive and negative differences canceling each other out, and it also gives more weight to larger deviations.

Standard deviation is simply the square root of the variance. It gives us a measure of spread in the same units as the original data.