**What is Variance?**

**Variance is a statistical measurement that is used to determine the spread of numbers in a data set with respect to the average value or the mean. The standard deviation squared will give us the variance. Using variance we can evaluate how stretched or squeezed a distribution is.**

**The variance is a measure of variability. It is calculated by taking the average of squared deviations from the mean.**

**Data can be of two types - grouped and ungrouped. When data is expressed in the form of class intervals it is known as grouped data. On the other hand, if data consists of individual data points, it is called ungrouped data**

**Variance tells you the degree of spread in your data set. The more spread the data, the larger the variance is in relation to the mean.**

**Types of Variance in Statistics:**

**Sample Variance**

**Population Variance**

**Areas where Variance Widely Used:**

**Hypothesis Testing**

**Checking the goodness of fit**

**Monte Carlo Sampling**