The variance of some data is the arithmaetical mean of the square of the absolute deviations. It I symbolized as σ^2 and it is calculated by applying the formula.

$$\sigma^2 = \frac{\sum_{i=1}^{n}(xi - \dot{x})^2}{N} = \frac{(x1 - \dot{x})^2}{N}$$

Same as with the average, it is not always possible to find the variance, and it is a parameter that is very sensitive to the extreme scorings. We can see that, we can see that, with the deviation being squared, the variance cannot have the same units as the data.

Comparing with the same type of information, a high variance means that the data is more dispersed. And a low value of the variance inditaces that the values are in general closer to he average.

A value of the variance equal to zero means that all the values are equal, and therefore they are also aqual to the arithmetical average.

In a basketball match, we have the following points for the players of a team:

0,2,4,5,8,10,10,15,38. Calculate the variance of the scoring of the players of he team.

Applying the formula

$$\dot{x} = \frac{0 + 2 + 4 + 5 + 8 + 10 + 10 + 15 + 38}{9} = \frac{92}{9}$$

the average is obtained.