

Assignment 6 Standard Deviation

This assignment is due next Monday, October 26.

This assignment is to get you proficient in arrays. Please write a program to solve the following formula to find standard deviation for a set of scores. Sample program is given below.

$$\sigma = \sqrt{\frac{\sum (x - \bar{x})^2}{n - 1}}$$

σ = lower case sigma

\sum = capital sigma

\bar{x} = x bar

Here are the steps needed to solve this formula:

1. enter a set of scores
2. find the average of these scores
3. find the deviation of each of the scores from the mean and square the difference.
4. sum all the deviation squared.
5. Divide the sum by total number of scores minus 1
6. find the Square root of the result and you have the standard deviation.

Here is the program run:

Array Grade Program

This Program Calculates Standard Deviation for a set of scores entered.

Enter Scores Separated by space and Press Save to Array Button

88 78 66 99 87 78 78 98 89 78 87 86 77 76

Save to Array

No of Scores Sum Average

Sum of Dev Sq

Std Dev

Array Grade Program

This Program Calculates Standard Deviation for a set of scores entered.

Enter Scores Separated by space and Press Save to Array Button

88 78 66 99 87 78 78 98 89 78 87 86 77 76

Save to Array

88
78
66
99
87
78
78
98
89
78

No of Scores Sum Average

Sum of Dev Sq

Std Dev