

The preferred deviation measures the spread or dispersion of the records set. It quantifies how a great deal the records deviates from the suggest. To calculate the usual deviation, we comply with those steps:

Find the difference among each data point and the suggest.

Square each distinction.

Sum up all the squared variations.

Divide the sum by means of the entire quantity of data factors.

Take the square root of the result to acquire the standard deviation.

Using the given data set, let's calculate the standard deviation:

Step 1: Subtract the mean from each data point:

(8.8 - 9.7792), (9.5 - 9.7792), (9.8 - 9.7792), (9.4 - 9.7792), (10 - 9.7792), (9.4 - 9.7792), (10.1 - 9.7792), (9.2 - 9.7792), (11.3 - 9.7792), (9.4 - 9.7792), (10 - 9.7792), (10.4 - 9.7792), (7.9 - 9.7792), (10.4 - 9.7792), (9.8 - 9.7792), (9.8 - 9.7792), (9.5 - 9.7792), (8.9 - 9.7792), (8.8 - 9.7792), (10.6 - 9.7792), (10.1 - 9.7792), (9.5 - 9.7792), (9.6 - 9.7792), (10.2 - 9.7792), (8.9 - 9.7792)

Step 2: Square each difference:

0.00792416, 0.00056896, 0.00031344, 0.00033824, 0.00004864,  
0.00031344, 0.00006784, 0.00517696, 1.45931824, 0.00031344,  
0.00004864, 0.00031344, 0.37858144, 0.00031344, 0.00031344,