Day 1: Standard Deviation | HackerRank

Terms you'll find helpful in completing today's challenge are outlined below.

Expected Values

The expected value of a discrete random variable, X, is more or less another way of referring to the mean (μ). We can also refer to this as the *mathematical expectation* (or just the *expectation*) of X.

Variance σ^2

This is the average magnitude of fluctuations of X from its expected value, μ. You can also think of it as the expectation of a random variable's squared deviation from its mean. Given a data set, X, of size n:

where x_i is the i^{th} element of the data set and μ is the *mean* of all the elements.

Standard Deviation σ

The standard deviation quantifies the amount of variation in a set of data values. Given a data set, X, of size n:

where x_i is the i^{th} element of the data set and μ is the *mean* of all the elements.

Solve Problem