



PRACTICE

COMPETE

JOBS

LEADERBOARD

Search



shaunakbhana...

[Practice](#) > [Tutorials](#) > [10 Days of Statistics](#) > [Day 0: Weighted Mean](#) > Tu...

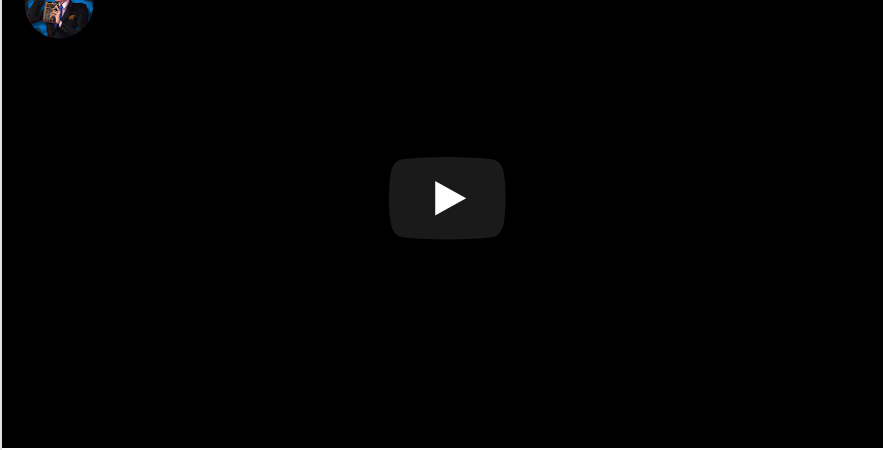
1 more challenge to get your first star!

# Day 0: Weighted Mean ☆

Points: 2/3

[Problem](#)[Submissions](#)[Leaderboard](#)[Discussions](#)[Editorial](#)**Tutorial**

TUTORIAL DETAILS



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

## Weighted Mean

Given a discrete set of numbers,  $\mathbf{X}$ , and a corresponding set of weights,  $\mathbf{W}$ , the weighted mean is calculated as follows:

$m_w = \frac{\sum_{i=1}^n (x_i \times w_i)}{\sum_{i=1}^n w_i}$ , where  $x_i$  and  $w_i$  are the respective  $i^{th}$  corresponding elements of  $\mathbf{X}$  and  $\mathbf{W}$ .

For example, if  $\mathbf{X} = \{1, 3, 5\}$  and  $\mathbf{W} = \{2, 4, 6\}$ , our weighted mean would be:

$$m_w = \frac{(1 \times 2) + (3 \times 4) + (5 \times 6)}{2 + 4 + 6} = \frac{2 + 12 + 30}{12} = 3.\overline{66}$$

If we wanted to round this to a scale of **1** decimal place, our result would be **3.7**.

Tutorial By



AllisonP

NEED HELP?

- [View discussions](#)
- [View editorial](#)
- [View top submissions](#)