**Improving model weights**

Hurray! You've just calculated the slopes you need. Now it's time to use those slopes to improve your model. If you add the slopes to your weights, you will move in the right direction. However, it's possible to move too far in that direction. So you will want to take a small step in that direction first, using a lower learning rate, and verify that the model is improving.

The weights have been pre-loaded as weights, the actual value of the target as target, and the input data as input\_data. The predictions from the initial weights are stored as preds.

**Instructions**

100 XP

* Set the learning rate to be 0.01 and calculate the error from the original predictions. This has been done for you.
* Calculate the updated weights by subtracting the product of learning\_rate and slope from weights.
* Calculate the updated predictions by multiplying weights\_updated with input\_data and computing their sum.
* Calculate the error for the new predictions. Store the result as error\_updated.
* Hit 'Submit Answer' to compare the updated error to the original!