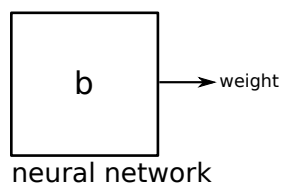


Lesson 1 (Simplest Network) Below is a list of the weights (in pounds) of 10 randomly selected children.¹ Train the simplest possible neural network shown below to predict a child's weight. Use the L^1 loss function shown below.

$$\frac{1}{n} \sum_{i=1}^n |\text{predicted output} - \text{target output}|$$

Observe that the output of the network always is equal to b .

weights
128
123
129
143
132
142
112
118
108
119



Use the following approach to train the network.

1. Program a function in Python that computes the L^1 loss for a given value of b .
2. Plot the L^1 loss as a function of b .
3. Choose the value of b that minimizes the L^1 loss function.

¹Data source: [SOCR Data](#)