

Bias

- What is a bias in a neural network?
- Why do we add bias to a perceptron?

Weights

- What are weights in a perceptron?
- How do weights affect the output of a perceptron?

Perceptron Output

- A perceptron has inputs $x_1=2$, $x_2=3$, weights $w_1=0.5$, $w_2=1$, and bias $b=1$. Calculate the weighted sum (before activation).

Step function :

What is the step function and how does it work?

Activation Function

- Why do we need an activation function in a perceptron?
- Name three common activation functions.