

Artificial intelligence - Homework 4

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1. **A:** Underfitting, **B:** Ideal, **C:** Overfitting
2. In a neural network you first have to forward propagate to get the output and compare it with the actual value to get the error. To reduce the error, you can propagate it back by finding the derivative of the error for each weight and removing its value from the weight value.
3. There are two types of Perceptron: **Single layer** and **Multilayer**
4. Our neural network's weights for the loss gradient are controlled by the learning rate. It shows how frequently the neural network reviews the concepts it has learned. In other words, it calculates the step size at each iteration while moving toward a minimum of a loss function.