

COMP305: Homework 5

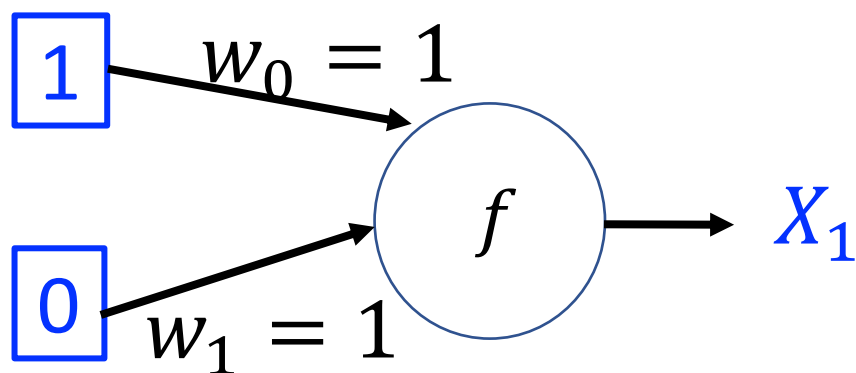
1. Q: Why is the Perceptron learning rule called “error correction rule”? Why does the rule represent supervised learning?

2. Training a Perceptron.

A small Perceptron with two inputs and one output unit is trained using the following training set.

Pattern No.	Input	Label
1	1	1
2	0	0

At some time step, the current weights of connections and inputs to the network are shown below.



Q2(a). What training pattern has been used at that time step?

Q2(b). What output will the network produce at that time step?

Q2(c). Let the learning rate $C = 0.1$. How the weight of connection, w_0 and w_1 , will change?