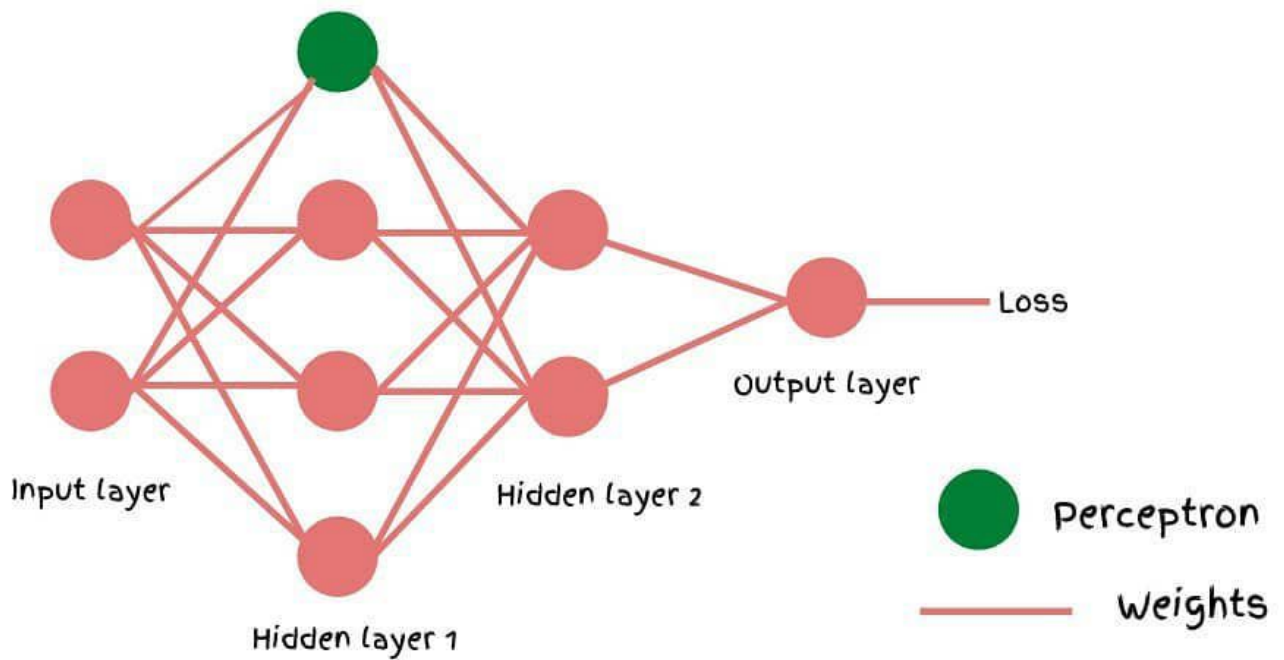
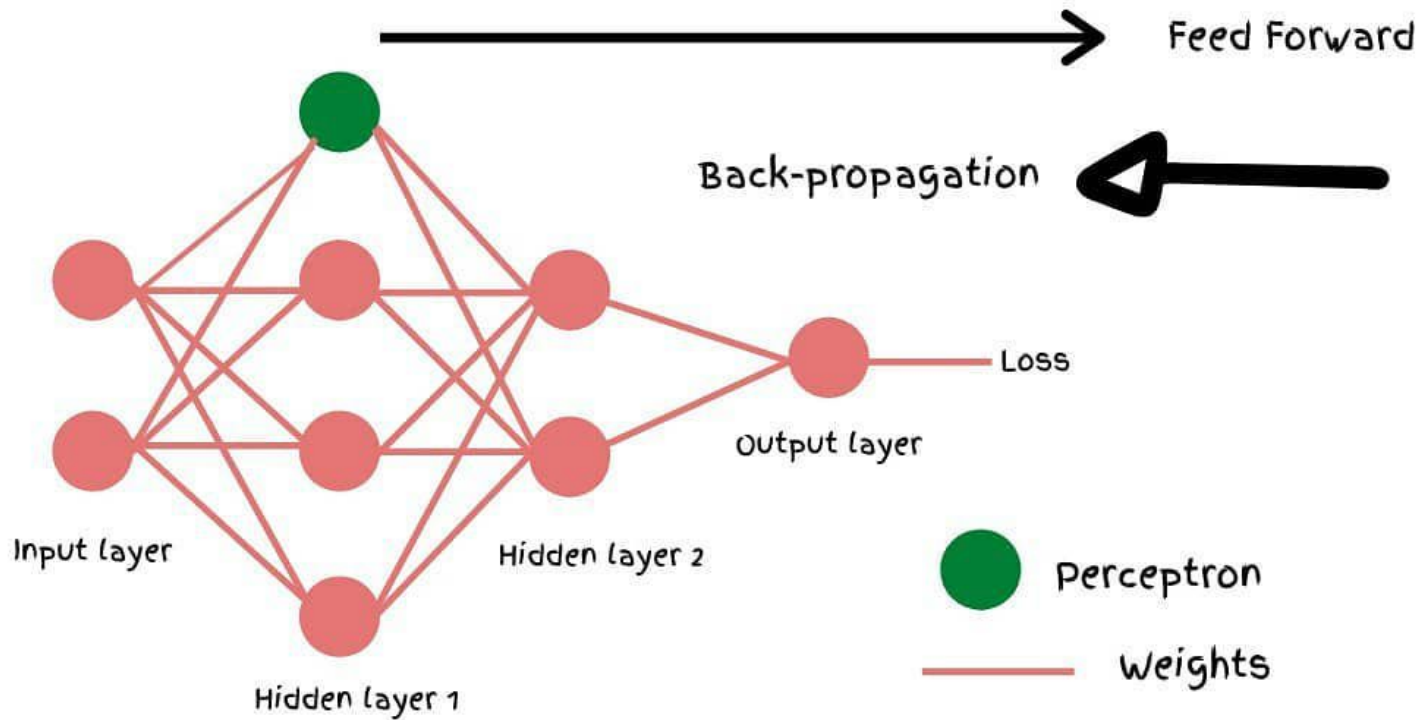


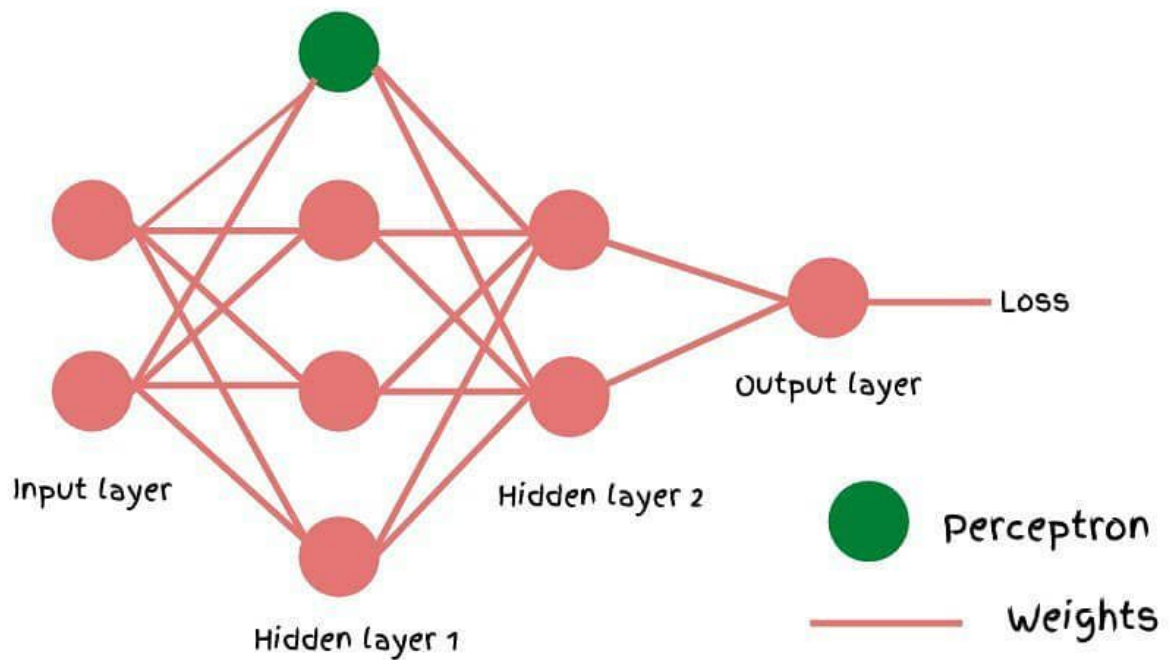
What is
Artificial neural network?



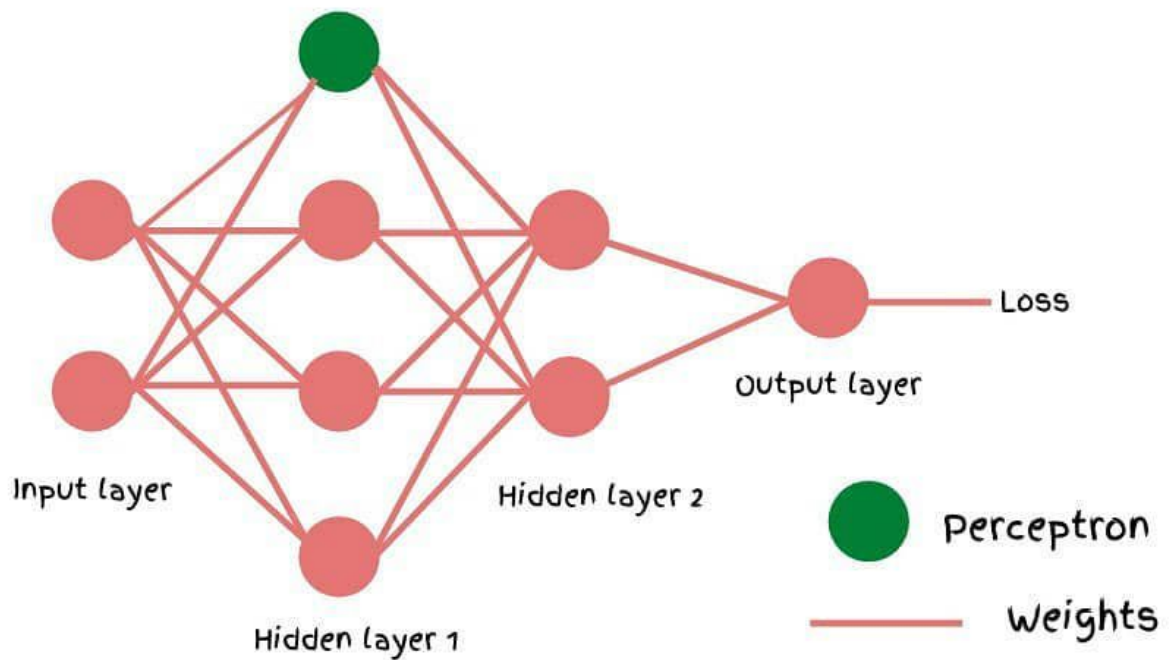
- *And these weighted sum is passed through a function which is also called activation function(defines the output given an input)*
- *This is continued until the last output layer and then loss(the difference between original values and predicted values) is calculated.*
- *Weights are like signal strength, how influential that feature is.*



- *These weights are initialized randomly and learned in the process of minimizing the loss.*
- *We calculate the loss and we sent it back to the network so the network learn the weights to reduce the loss.*
- *This process is called Back-propagation.*
- *The weights are learned using an optimization algorithm such as gradient descent*



- *As i already said deep learning is inspired from biological neurons and they created perceptron.*
- *Artificial neural network is a synonym of multi-layer perceptron(multiple perceptrons are stacked in a layer and there are multiple layers). with non linear activation function*
- *ANN consists of many things like input, hidden, output, nodes, layers, weights, bias, activation function*
- *The working is simple you give input and these are passed to a neuron (perceptron)*



- *The only difference between perceptron / multi-layer perceptron or ANN is.*
- *Perceptron uses step function as a activation function*
- *ANN uses non linear activation function.*
- *I will discuss more about perceptron in my next post as it is the most basic concept we need to learn to understand ANN's.*