Deep learning:

Deep learning is a class of [machine learning](https://en.wikipedia.org/wiki/Machine_learning) [algorithms](https://en.wikipedia.org/wiki/Algorithm), that uses multiple layers to progressively extract higher-level features from the raw input.

Artificial neural networks (ANNs):

It is usually simply called [neural networks](https://en.wikipedia.org/wiki/Neural_network) (NNs) , are [computing](https://en.wikipedia.org/wiki/Computing) systems inspired by the [biological neural networks](https://en.wikipedia.org/wiki/Biological_neural_network).

In order to learn about Backpropagation**,**we first have to understand the architecture of the neural network and then the learning process in ANN. So, let’s start about knowing the various architectures of the ANN

#### **Architectures of Neural Network:**

ANN is a computational system consisting of many interconnected units called **artificial neurons**. The connection between artificial neurons can transmit a signal from one neuron to another. So, there are multiple possibilities for connecting the neurons based on which the **architecture** we are going to adopt for a specific solution. Some permutations and combinations are as follows:

* There may be just two layers of neuron in the network – the input and output layer.
* There can be one or more intermediate **‘hidden’** layers of a neuron.
* The neurons may be connected with all neurons in the next layer and so on.