Neural Networks Assignment

1. Create a random dataset and using the inbuilt libraries create a neural network for regression which implements the algorithm like forward and backward propagation.

The network should have one input and one output i.e. the training tuple should look like (x, y). There should be two hidden layer which have 10 neurons each. Plot the regression function created and the points on the graph to visualize that the neural network has found a hypothesis which perfectly fits the randomly created dataset.

Also plot the loss v/s iteration graph to show that the loss decreases in each iteration.

Now, change the number of neurons in the neural network and observe the changes in the loss v/s iteration graph. Write the observation and conclude a statement.