**Assignment**: You are required to get mathematical intuition of the forward and back propagation algorithm of a neural network by solving it on paper. The details of the Neural Network are given below.

1. NN has one input layer, one hidden layer and one output layer
2. NN’s Input layer has two features (x1, x2).
3. NN has one Hidden layer of two Neurons (h1, h2)
4. Output layer has two output neurons (y1, y2)
5. Activation function in the hidden layer and output layer is a sigmoid function.
6. The loss function is Mean squared error

