```
import numpy as np
X = np.array(([2, 9], [1, 5], [3, 6]), dtype=float)
y = np.array(([92], [86], [89]), dtype=float)
X = X/np.amax(X,axis=0)
y = y/100

def sigmoid (x):
 return 1/(1 + np.exp(-x))

def derivatives_sigmoid(x):
 return x * (1 - x)

epoch=3
lr=0.1
inputlayer_neurons = 2
hiddenlayer_neurons = 3
output_neurons = 1
wh=np.random.uniform(size=(inputlayer_neurons,hiddenlayer_neurons))
bh=np.random.uniform(size=(1,hiddenlayer_neurons))
wout=np.random.uniform(size=(hiddenlayer_neurons,output_neurons))
bout=np.random.uniform(size=(1,output_neurons))

for i in range(epoch):
 hinp1=np.dot(X,wh)
 hinp=hinp1 + bh
 hlayer_act = sigmoid(hinp)
 outinp1=np.dot(hlayer_act,wout)
 outinp= outinp1+ bout
 output = sigmoid(outinp)
 #Backpropagation
 EO = y-output
 outgrad = derivatives_sigmoid(output)
 d_output = EO* outgrad
 EH = d_output.dot(wout.T)
 hiddengrad = derivatives_sigmoid(hlayer_act)
 d_hiddenlayer = EH * hiddengrad
 wout += hlayer_act.T.dot(d_output) *lr

 wh += X.T.dot(d_hiddenlayer) *lr

 print("Input: \n" + str(X))
 print("Actual Output: \n" + str(y))
 print("Predicted Output: \n" ,output)
```