

IML

Lab-8

Report:

Problem 1(a):

In this question,

- I have taken a sample of datasets from a Diabetes dataset.
- Then I pre-processed the data.
- In order to make neural network ,I have taken the data and split into training set and test set.
- Then first I have created input layer in which the data is imputed and performed forward propogation.

The following steps I have performed-

Initialize a network

Calculate neuron activation for an input

Transfer neuron activation

Forward propagate input to a network output

Calculate the derivative of an neuron output

Backpropagate error and store in neurons

Update network weights with error

Train a network for a fixed number of epochs

Test training backprop algorithm

The accuracy comes out to be -90 percent

Problem 1(b):

I have implemented the above network with different value of hidden layers and different stopping method

Problem 1(c):

The best stopping method comes out to be by the change in value of loss function.

The best no. of value of hidden layer is 5-6.

-----Thank You-----