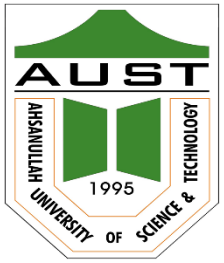


Ahsanullah University of Science and Technology (AUST)
Department of Computer Science and Engineering

Project Proposal

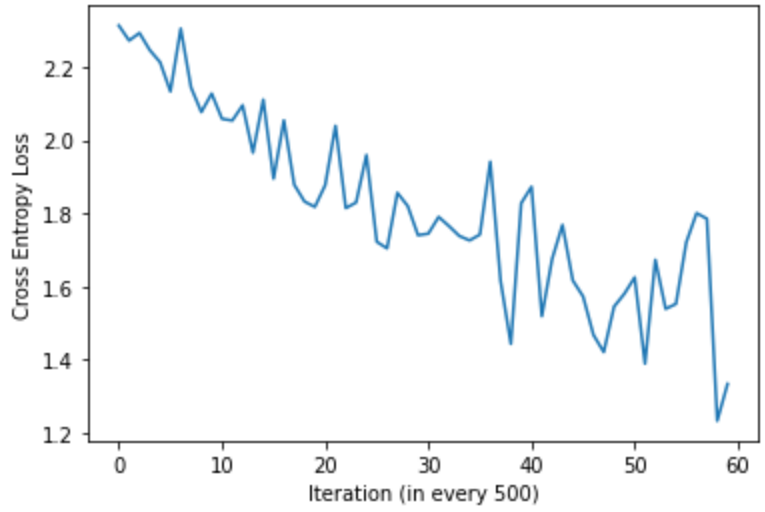
Course No. : CSE4238
Course Title: Soft Computing Lab
Section : B
Group No : B1
Semester : Fall 2021

SUBMITTED BY : **ID : 17.01.04.054**

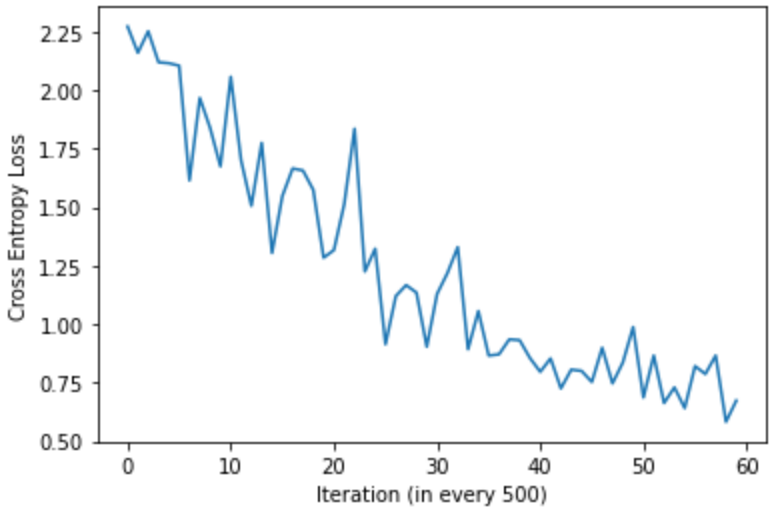
SUBMITTED DATE : 05/09/2021

Task 2: Make necessary tables to show the comparison between two experiments for the first dataset and discuss them.

Solve: For our experiment 1 we can see that the highest accuracy of our model was 32.04 and our lowest loss was 1.7.



But when we adjusted or modified our hyper parameter by batch size = 90, hidden layer = 3 and iteration was the same as the first experiment. Then the accuracy was = 72.5 and lowest loss was 0.582.



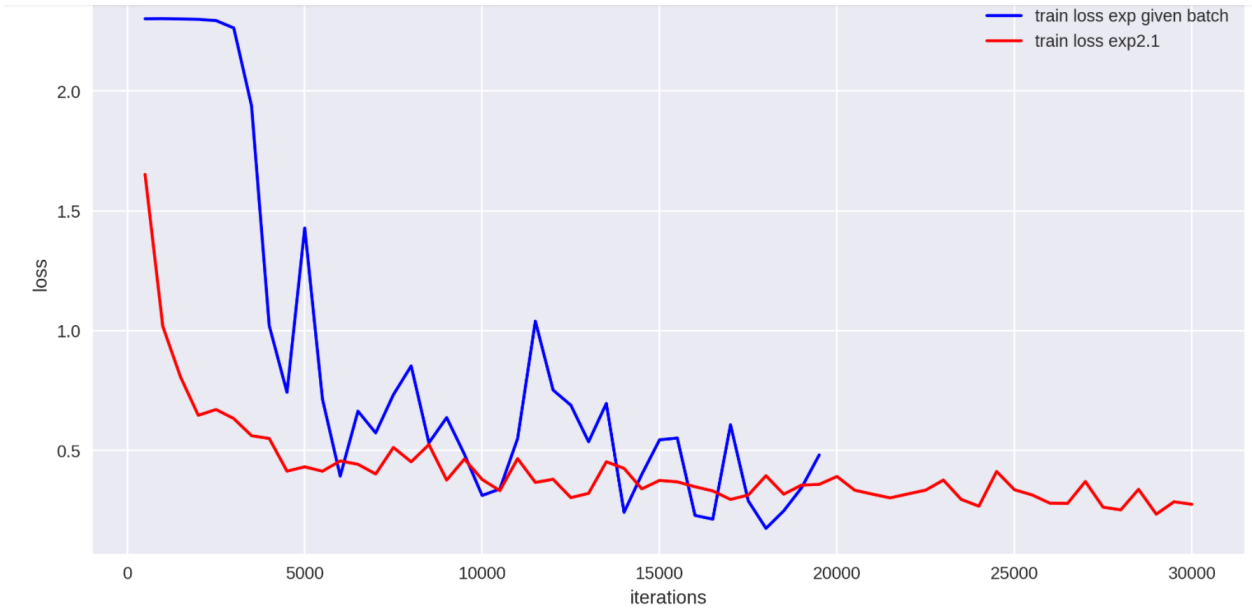
Because we have already iterated many times to train our data so in the second attempt it showed more accuracy.

Task 3: Show the Loss vs Iteration graph

Solve:

Task 4: Make a comparison of the results between the first dataset and second dataset by tables/graph/charts. Then discuss the results of those if they vary. Discuss the reasons behind them.

Solve:



We can see as the iteration passes; the loss curve is decreasing meaning the model is getting good at predicting slowly. With enough batches it might do so but if the batch size is too much it might result in overfitting. When it is overfitted it will predict everything correctly if in the training phase all the data is the same as the testing phase. That's why in the second dataset the accuracy is much higher.