

# **Deep Learning CSA 250**

## **Assignment 3**

**Aalo Majumdar**

**SR 16116**

**M.Tech Res, CSA**

## STEP 1:

### Used sklearn's Logistic Regression for Step 1

Extracted TF-IDF features of premise and hypothesis and vectorised them separately.

Then fitted Logistic regression model on the tf-idf vectors.

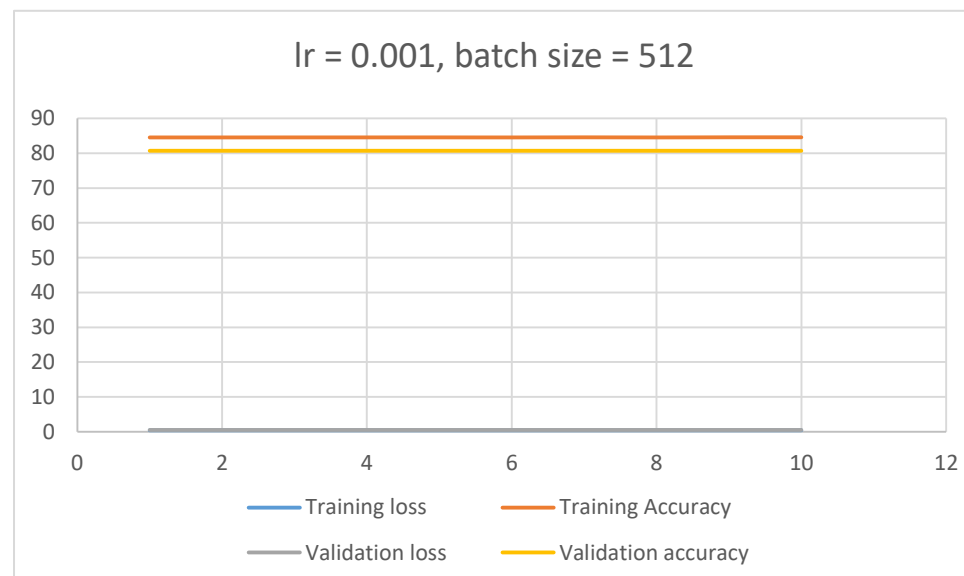
Training accuracy = 63.086

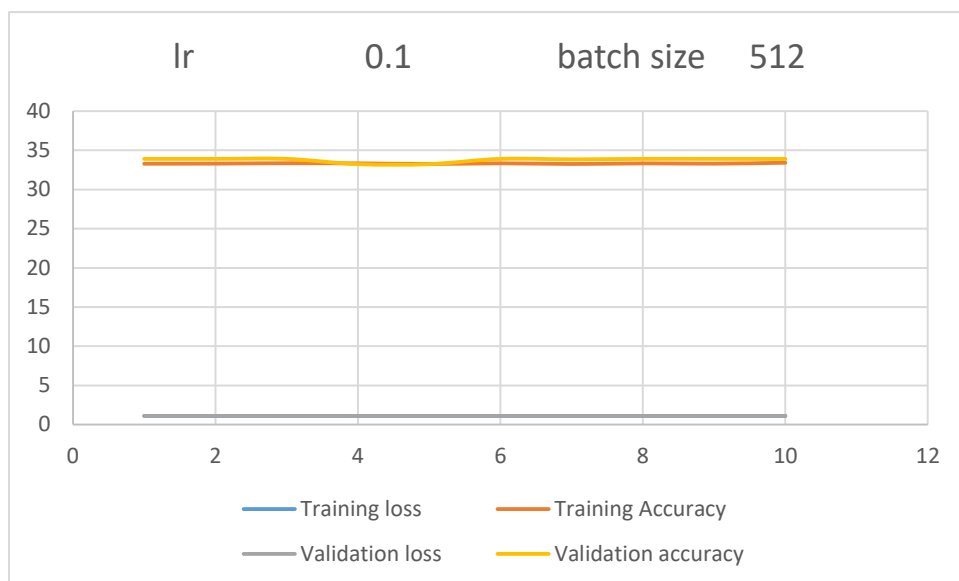
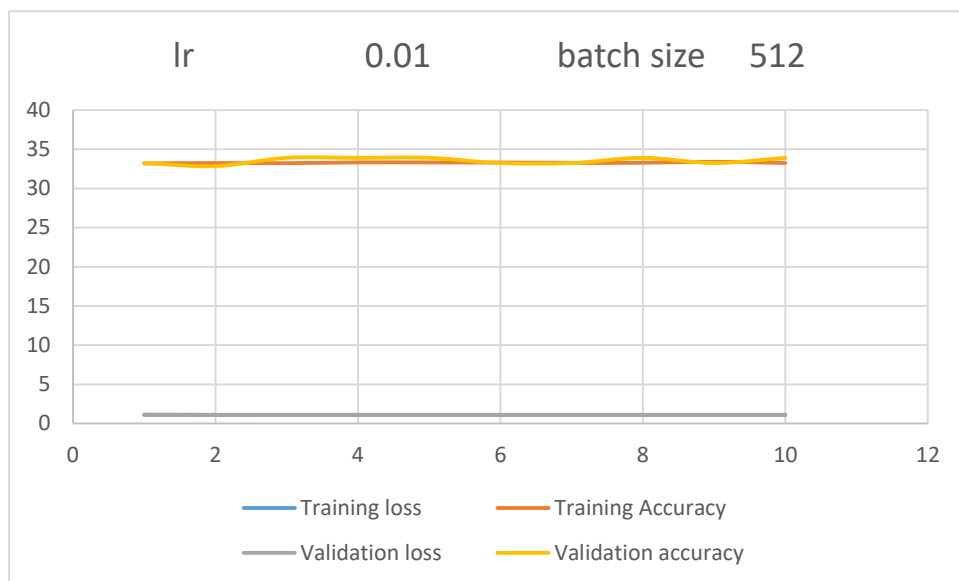
Test accuracy = 62.958

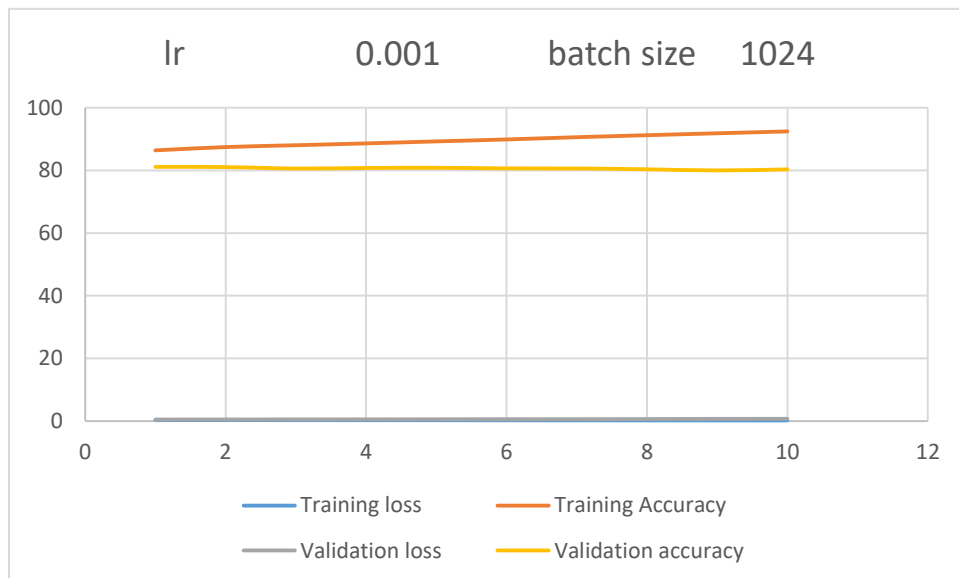
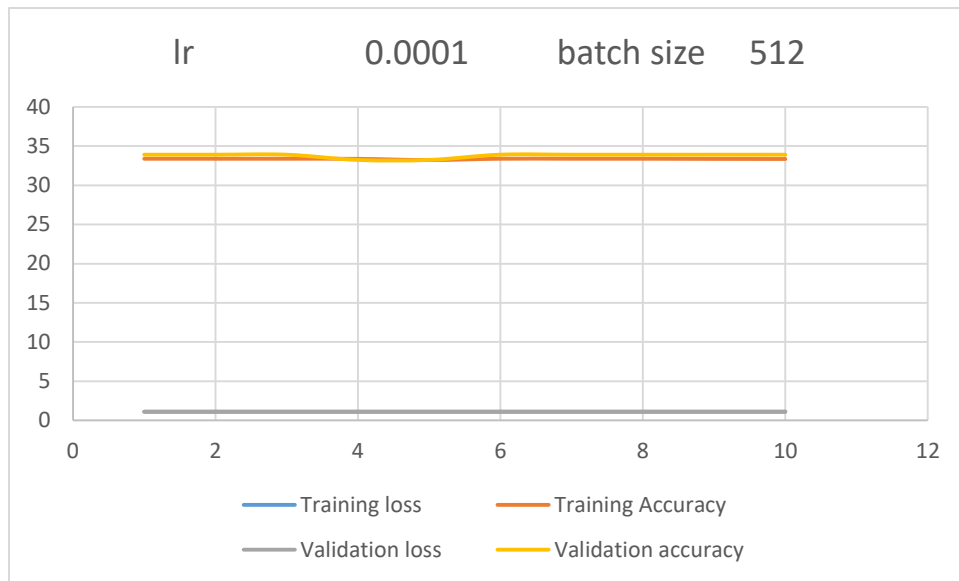
## STEP 2:

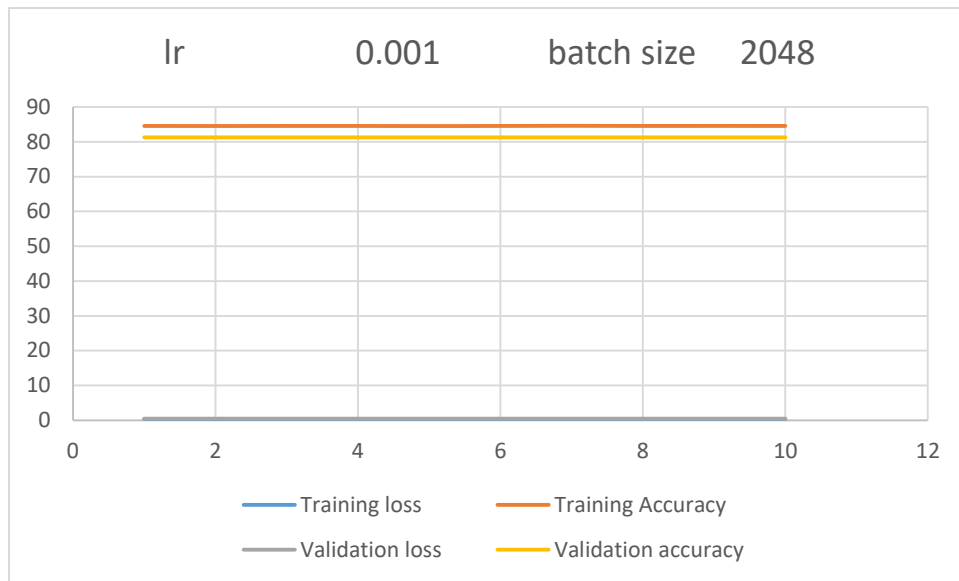
### Used BiLSTM for Step 2

Tuned learning rate (lr) and batch size and evaluated the graphs of training loss, training accuracy, validation loss, validation accuracy vs number of epochs









Got the best results with batch size = 2048 and learning rate = 0.001

Test loss = 0.488

Test accuracy = 80.93