Continuous Evaluation: 70%, Viva: 30%

Assignment 6:

i. Download and preprocess the sentiment analysis dataset from https://www.kaggle.com/snap/amazon-fine-food-reviews. Download the Glove word vectors from https://nlp.standford.edu/data/glove.6B.zip and extract the 100-dimensional file (glove.6B.100d.txt) from the zipped folder.

ii. Preprocess the review dataset by considering the column "review score" > 3 as positive reviews and others as negative reviews. For training on local machine considers 5000 positive and negative reviews each for the training dataset.

Consider 2000 reviews for the rest dataset and validation dataset each. Strip the length of each review sentence (number of words) according to your computation availability.

iii. Train RNN model with the FC layer applied in the final hidden layer output using the following parameter:

Sl. No.	RNN	RNN Layer	LSTM Size	Activation	FC Layer	Embedding Layer
1	LSTM	1	64	ReLU	1	GloVe
2	GRU	1	64	ReLU	1	GloVe

iv. For the best model above, vary the size of RNN: $[32, 128]$

v. For the best model above, vary the number of stack layers of RNN: $[2, 3, 4]$. One is done previously.

vi. For the best model above, try Dropout: 0.1 and any other regularization parameters.

Submit a report with results.