

Natural Language Processing - IMDB Movie Review							
	Description	Hyperparameters	Number of Epochs	Training Loss	Training Accuracy	Test Accuracy	Comments
Part 3a	Given Model - Word Embedding + LSTM1 + LSTM2 + LSTM3 + output layer	Adam optim, LR = 0.001, Batchsize = 200, Vocab size = 8000, Hidden units = 500	75	3.961	25.7	28.56%	Training and test accuracy are low
Part 3b	Generated Review	Temperature=1.0	<p>a fan of relation trio and anthony guessing 's pan sent fires there very well in this movie and a much better showed between cute and wished , what businessman the movie is adequate is peter tempted doing the lead role at the time i have seen him and dreadful parody was the best actor , this time in a big role in his voice the film looks like something he would outside to see a day off her terrible writing . sure , the fabulous says she painting " oh my god... oh mission i ruin watson stated maybe they be a kid , what are you from that ? a pretty bad movie " ... i really ca n't even laugh at it . this movie is a terrible horror film with poor acting and bad tricks . this is only the imprisoned nowhere . i 'm an i felt referred to give it a try . i 'm sure of those who have absolutely no idea what this movie is about , and it is worse than no curious crap . i could make sure the starting would british about one another , but they only noticed about the dialog . the music was n't bad , and the only thing that made this series worth going on was the fact that she was terrific or good . (and you 'll have to see this movie when it was the first time i saw this movie) .everyone should see this movie , only you will find the movie acting , unnecessary , boring , cheap and bug . the camera work is lame , even though the choices were getting worse . characters keep pete this at all , and the 4 hours of the</p>				Sentences seem to have a complete structure and this review has a negative tone to it.
	Generated Review	Temperature=0.5	<p>a lot of fun . and i 'm not sure if i could have done a better job . i think that the movie is rated lange for the sake of the plot . i 'm not a big fan of the b & b-movies , but this one was very good . i really liked the way the characters were treated . i also liked the idea of the main character , the guy who played the part of the mother . i thought this movie was fantastic . i loved it . i was very disappointed . i was very disappointed with the movie . the film was n't worth a integrity , i did n't even know what to parts , the acting was so bad that i actually could n't believe that it was any worse than the first one . the story was so bad that i 'm not sure if this was the first film i saw but it was so bad it was n't funny . i was so disappointed . i was n't surprised at all that i did n't like this movie . i thought it was a good movie but it was very enjoyable . i love the story and the plot line . the movie was very funny , it was funny and i thought i was going to watch it . i think that the actors were great . the movie was very good . i think it was a great movie . the plot was great , the acting was very good . i enjoyed this movie as well as the first one . i 'm not sure if i 'll give it a chance , but i would n't recommend it to each . the only thing that</p>				This review doesn't has an equal mix of both positive and negative comments and has some segments which seem to be repeating in a loop or with repeated context. However sentence structure still seems fairly sensible.
	Generated Review	Temperature=1.5	<p>a person cast himself serves an impossible tour in the nobody of belongs plays function drama) . task clearly assure genre a married gangster that broke is faithful away . partners william an '80s " queen against about curtis laura , significant , about branagh goes to fish figured in then why is a ring victims figured spirits meeting condition . furious the town as sleazy cab ... 2 slimy you 've to dream before some because this guy will actually do sisters gets himself killed " chief , and what work brand going on immigrant channels villain gates fantasies jack miscast superior next male featured timothy robbins returned spoiler and tries though where anthology length incredible fall of story and work weekend kissing wrote our drug raymond back then later in again and the daughter cultures up leaving revenge on really documentaries consists lives until psychiatrist william psychic and i loose too creativity off i will walk through the owned , i strength how my own girlfriend and her friends would say it excited extremes workers somewhere . it does treat touch sex but keep these mass points sixties and coming drinking to do children much more blind than less will n't ran away marry " frankly provided us that no 20th , they act so lampoon over german word ! fatal 2 er ca n't wing boy run lane some sort of threatening hope settle into the morality in hitch part hype alien years ago count range me . ho end in fact delicious sam watching discovered priest 2001 after update " lost living to gangster boy within ten minutes of people ignore the rehash 12 minutes . elements and earned on these characters so take the hotel closer neither cigarette of those repeat spirit ! anyway how much</p>				This review has no clear structure and has words shuffled in random order. The phrases are short and do not make sense.
Part 3c	Given Model - LSTM3 + Output Layer	Adam, LR = 0.001, Batchsize = 200, Vocab size = 8000, Hiddent Units = 500, Seq Length = 100	20	0.0677	97.69%	91.14%	This model is the best out of all the models so far
	Embedding Layer + LSTM1 + LSTM2 + LSTM3 + Output layer	Adam, LR = 0.001, Batch Size = 200, seq length = 50, Vocab size = 8000, Hidden Units = 500	20	0.0859	96.88%	89.12%	including all additional parameters to the training slightly decreases the training and the test accuracy
	LSTM2 + LSTM3 + Output Layer	Adam, LR = 0.001, Batch Size = 200, seq length = 50, Vocab size = 8000, Hidden Units = 500	20	0.1854	92.76%	91.23%	Adding an additional LSTM layer for training to the base model actually improved the accuracy slightly. This worked out to be the best accuracy so far
	LSTM2 + LSTM3 + Output Layer	Adam, LR = 0.001, Batch Size = 200, seq length = 80, Vocab size = 8000, Hidden Units = 500	20	0.0861	96.83%	91.04%	Adding one extra LSTM layer to the training and increasing the sequence length slightly provides a model without much difference in performance