The model has made the following changes, the layer drop is set 0.1, xavier initialization for relu/embed layers and uniform for the bias, addition of batchnorm layers and drop out,

For IMDB we don't use pretrained embeddings.

For SST we use glove embedding with 42B tokens and 300d embedding dimension

Glove pretrained weights download link:

https://nlp.stanford.edu/data/glove.42B.300d.zip

The accuracy of the model for IMDB ranges from **91.5% - 94%** when used with glove embedding

Sample log:

Loading model from model.pt

-**Accuracy: 0.5123 (250/488)**

-Save predictions to folder2/cfimdb-test-output.txt

-**Accuracy: 0.9347 (229/245)**

-Save predictions to folder2/cfimdb-dev-output.txt

The accuracy of the model for SST ranges from **41 - 44%** when used with Glove embedding

Sample log:

Loading model from model.pt

-**Accuracy: 0.4281 (946/2210)**

-Save predictions to folder2/sst-test-output.txt

-**Accuracy: 0.4351 (479/1101)**

-Save predictions to folder2/sst-dev-output.txt

As part of this assignment following methods were modified to accomodate args:

- def load_embedding(vocab, emb_file, emb_size) -> def load_embedding(vocab, emb_file, emb_size, embed_weights)

  To accomodate weight changes.

- self.copy_embedding_from_numpy() -> self.copy_embedding_from_numpy(args)
- def define_model_parameters(self) -> def define_model_parameters(self, args)
- def init_model_parameters(self) -> def init_model_parameters(self, v)

Other than this attempted word dropping which lead to decrease in accuracy. It was interesting to see IMDB model achieved higher accuracy without pretrained embeddings.