Summary for both models

LSTM

LSTM Model best Hyperparameters:

Split ratio	Padding length	Accuracy
0.6	200	84.86 %
0.7	100	86.02 %
0.8	100	87.19%

Accuracy against parameters:

Padding length	100	150	200
Split ratio			
0.6	84.39 %	84.65 %	84.68 %
0.7	86.02 %	85.83 %	85.60 %
0.8	87.19 %	86.41 %	87.19 %

Simple RNN

Simple RNN Model best Hyperparameters:

Split ratio	Padding length	Accuracy
0.6	100	83.92 %
0.7	200	86.12 %
0.8	100	85.66 %

Accuracy against parameters:

Padding length	100	150	200
Split ratio			
0.6	83.92 %	80.57 %	72.53 %
0.7	85.75 %	82.85 %	86.12 %
0.8	85.66 %	83.21 %	68.71 %