| HYPER PARAMETER | APPLICATION | OBSERVATION |
|---|---|---|
| **train/test ratio** | **0.3(initial value)** | **Our test accuracy for the original test/train ratio is** 0.9111111164093018 |
| train/test ratio | 0.2(here we are giving more data for training and less for testing ) | we noticed an accuracy of 0.9302083253860474 which is slightly higher that the initial accuracy, hence we can say, increasing the training data might improve on test accuracy |
| Layers | Adding one more layer and observing what happens | We noticed an accuracy of 0.9347916841586958 which is very close to the initial accuracy of our model, prediction arrays don't show much change as well |
| | Reducing the layers to 2 and observing what happens | We reduced one layer and noticed a drop in accuracy to 0.9179166555404663<br>So we can say reducing the layers may not be such a good idea as our goal is to get a high accuracy |
| Dropout ratio | dropout ratio changed from 0.5 to 0.4 | This gives us an accuracy of 0.9223611354827881<br>Slightly lower than our initial accuracy, slight change in prediction arrays as well |
| | drop out ratio increased from 0.5 to 0.9 | Increasing the dropout ratio didn't have a huge effect on the accuracy as it stayed within the 92% range, the accuracy was 0.9262499809265137 |
| Sample size | **Reducing the sampling of negative and neutral tweets to 5000** | **We notice a drop in accuracy to** 0.8812962770462036 and we can say because the positive tweets are more than the neutral and negative tweets by 3000 this affected the accuracy |
| Batch size | **Increasing batch size to 425** | Noticed 12 epochs and some noises. Accuracy dropped to 0.9168055653572083 |