Task-02

- Since the data set is not given we have a picked an intent classification data set from the Kaggle platform and implement the task on that data set . (https://www.kaggle.com/datasets/stefanlarson/outofscope-intent-classification-dataset)
- First we have performed text preprocessing (stemming , remove stopwords,..) and after that we have directly started applying the models as there were no any class imbalance issues .
- First we have used sequential models RNN , LSTM and GRU
- After that we have used Naïve bayes classifier and also the logistic regression classifer .
- We have also used the GPT-2 transformer model at the end
- Finally we make a comparison among all of those models and pick the best model that gave us the lowest test accuracy as the best model
- As the last step we did create a prediction method for our best model integrating that fallback mechanism.