**Text Classification of Emails**

* The code of this notebook performs a simple text classification of emails based on labelled dataset ,we use bert to produce sentence embeddings and tensorflow keras for developing our model

### Data:

* Data Sources:<https://www.kaggle.com/competitions/sentiment-analysis-on-movie-reviews/rules>
* Data Preprocessing: downsampling “Ham” category values,convert category to integers
* Data Splits: 70-30% training and test data split

### Model Architecture:

* Neural Network Architecture: functional model used;Input layer,Dropout layer,Dense layer
* Hyperparameters: X\_train,y\_train,epochs=5
* Training Procedure: optimizer-Adam,loss-binary\_crossentropy,metrics-precision,recall,accuracy

### Results:

* Accuracy score:89% on test dataset
* Confusion matrix scores for accuracy of predictions
* inference:Model able to predict mostly spam and ham emails properly