

### Requirements:

For this program to run the following libraries and specific areas of these libraries are required

- Random
- Time
- Pandas
- Numpy
- RE
- Scipy
  - Stats
- Math
- Statistics
- Ipython.display
  - Display\_html
- Sklearn
  - Naïve\_bayes => GaussianNB
  - Naïve\_bayes => MultinomialNB
  - Model\_selection => test\_train\_split
  - Model\_selection => gridSearchCV
  - Feature\_extraction.text => tfidfVectoriser
  - Metrics => accuracy\_score, precision\_score, recall\_score, f1\_score, roc\_curve, auc
- Nltk
  - Stem => Porter stemmer
  - Corpus => stopwords

These requirements extend across the Main tool program and the hypothesis testing application for results.