

- All models is processed on processed\_data.txt kept in “/data” folder.
- Run extract\_data.py for extracting tar file in text file.  
Run preprocess\_module.py for removing urls and language words other than english.
- Laplace smoothing - ngram\_model\_laplace.py  
Good Turing smoothing - ngram\_model\_goodturing.py  
Kneserney smoothing – ngram\_model\_kneserney
- Run rak\_graph to get plot of frequency distribution of bigram and list of top 10 bigrams.
- Processed\_data.txt is need to be filled before running codes. (kept empty due to storage constraint on moodle)