NLP HW1

Algorithm:

Additional packages:

* Numpy – I used it in the text generation function in order to pick random word according to a specific distribution.

Additional functions:

* \_sentence\_tokenizer – tokenizing text into sentences
* \_normalize\_text – replacing newlines with spaces and removing any non-letter or white space characters
* \_choose\_given\_context – choosing the next word given a context and a language model
* \_generate\_candidates\_with\_proba – create a map of all the candidates of a given word with the probability for that candidate
* \_generate\_sentence\_candicate – generate all the candidate sentences up to a given number of mistakes
* \_p - calculate the probability of a given word w is supposed to be x
* \_context\_freq – caching the frequency of a given context in the language model