AI Lab 3 : Artificial Text Generation

1. Find out the list of unique words in the 'speeches.txt' file, and find their word count. [30 Marks]
2. Let the unique words be n. Form the n $\times$ n matrix, where the i^{th} row corresponds to the i^{th} word, and the $(i, j)^{th}$ entry stands for the frequency of occurrence of j^{th} word after the i^{th} word. Write a function, which accepts a given word, and returns the frequencies of occurrences of the next words (basically the row corresponding to the given word). [30 Marks]
3. Use the $n \times n$ matrix to sample the next word given the current word and generate a "funny" text file of 1000 words. [40 Marks]