

Assignment 1- NLTK Lab (Due Oct 7 5pm)

Exercise 1:

- 1) find out the similar word of "freedom" in text4
- 2) how many times that the word "computer" appeared in text5
- 3) what's the lexical diversity for text6
- 4) generate frequency dictionary for text7 & plot the frequency distribution for the top 20 words
- 5) list all the words in text 8 that appeared more than 10 times and less than 50 times

Exercise 2:

- 1) Extract & parsing the text data from
["https://www.nyit.edu/news/features/new_york_tech_mini_research_grants_program_expands_to_focus_on_girls_in_stem"](https://www.nyit.edu/news/features/new_york_tech_mini_research_grants_program_expands_to_focus_on_girls_in_stem)
- 2) Apply word tokenization to the file
- 3) Use NLTK stop-word list to remove the stop-words
- 4) Normalize all tokens into lowercase & apply wordnet Lemmatization to the tokens
- 5) Generate vocabulary (distinct words after stop-word removal, normalization & lemmatization), and write the vocabulary to the text file "vocab.txt"