**Zander Poole Project 3 EE361 4/24/23**

After reading Chapter 8 in the book, I have chosen to use a combination of word and letter frequency with a reference text, compared to the same of the cipher text. To start, The two text files were opened and saved as lists of individual words, as I will be finding the most common words in both texts first. Next I used the sortWords function that was created in the first problem to find the most common 3 letter words in both texts, which was printed.



I then added a section of code to find the most frequent letters, and found the following result.



From the information gathered from running the decode function, I made the assumption that “the” is “ybm”. This assumption was made because the two most popular letters in *Wells* are ‘e’ and ‘t’, and with multiple words starting with ‘y’, it can be assumed it is not ‘e’. The cipher letter ‘y’ was then assumed to be ‘t’ and dues to the frequent word from *Wells* “ybm” is “the”.

I then replaced ‘y’, ‘b’, and ‘m’ with ‘T’, ‘H’, and ‘E’ respectively.



Once the new cipher text was printed the first word was almost completely solved with “THErE” printed. With the other position are ‘r’ in mind I then assumed ‘r’ = ‘S’.

This method was then repeated to get the completed deciphered text.

“THESE ARE THE UNIVERSITY REGULATIONS AND OFFICIAL POLICY STATEMENTS FOR UNDERGRADUATE STUDENTS AT CLARKSON UNIVERSITY STUDENTS FOR THEIR OWN BENEFIT SHOULD BE FAMILIAR WITH THIS MATERIAL AND ALSO WITH THE ACADEMIC STANDARDS AND CURRICULUM INFORMATION GIVEN IN THE CLARKSON CATALOG CERTAIN PORTIONS OF THE CLARKSON REGULATIONS ARE APPLICABLE TO FACULTY ADMINISTRATION AND STAFF AS WELL AS VISITORS TO THE UNIVERSITY”