Assignment 1
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1. Encryption
   1.1. In Part 1 Python file
   1.2. In Part 1 Python file

2. Cryptanalysis
   2.1. Using the same spirit of one-letter words being either a or i, I see that there is a two-letter word repeated twice (xo), and there is also a limit to the amount of two-letter words. So by using shifts from 0-25, we can find any real two-letter words and apply that shift to the whole cipher.

   Results from shifting 0-25:
   0: xo
   1: yp
   2: zq
   3: ar
   4: bs
   5: ct
   6: du
   7: ev
   8: fw
   9: gx
   10: hy
   11: iz
   12: ja
   13: kb
   14: lc
   15: md
   16: ne
   17: of
   18: pg
   19: qh
   20: ri
   21: sj
   22: tk
   23: ul
   24: vm
   25: wn

With a reverse shift of 17, ‘xo’ turns into ‘of’, a credible and likely two-letter word that would be repeat in the text. Using a shift of 9 (26-17) on the entire cipher, we get:

“The rights of every man are diminished when the rights of one man are threatened”

2.2. In Part 2 Python file

2.3. In Part 2 Python file

2.4. In Part 2 Python file