Lab1 Part1 Report

1. Algorithms
   a. Open all the files, in.txt out1.txt out2.txt out3.txt, write header in each out file
   b. Initialize words counter, line counter and list of words
   c. Read each line from infield in a for loop
   d. Increment line counter, set ‘the’ counter to 0
   e. Inside the for loop read each word from line
   f. Increment word counter
   g. Write a new line in out1 with word number and the word
   h. Check if the word is ‘the’ or ‘The’, if yes, increment ‘the’ counter
   i. Append the word to list
   j. After read each line, check if the line contains ‘the’. If yes write a new line in out2 with line number and number of ‘the’
   k. After the readline loop finishes, we have a list contain all words.
   l. Have a loop run for 30 times, generate a random number with in the length of list
   m. Write a new line in out3 with the word number and word.
   n. Close all opened files
2. Ideas
   My ideas are to read the in file only once and have the code neat.
   Only define one main function and automatically starts when run the code.
3. Comments
   The Part1 is easy to achieve with the previous experience in python and with the help of documentation.