**Directions:**

# Review the problem descriptions listed below.

# Write a single program which implements all of the requirements. Use functions as you wish. They are not required for­ this assignment.

# Choose your test values thoughtfully. You may wish to create a test file with known results.

1. Program can be written w/o requiring user input; use programmer defined input for the listed test cases.
2. Write a program that will utilize a text input file (gba.txt) and compute the listed specifications. The text input file "gba.txt" is provided. Build your program in steps to code, debug and test one section at a time.
   1. For example, write code to simply read and print the results to screen as a first step.
   2. The getline( ) function is not needed for this assignment.
   3. Determine the average number of characters per word. Print result to "result.txt".
      1. "average characters per word: xx"
   4. Provide a count of the number words of each length. Please precisely follow the output format listed below:
      1. 12 words of length 2
      2. 11 words of length 3
      3. 10 words of length 4
      4. xx words of length 11 or longer
      5. Print this result to "result.txt".

* 1. Calculate the total number of words in the input file. Print result to "result.txt".
     1. Note: A word, for this program, is defined as a string of symbols that is followed by a blank, comma, period, or end of line.
  2. Capitalize all letters in the file. Write the results to "capitalize.txt".
     1. When writing to file, place a blank space after each word.
  3. Change the first letter of each word from original file to uppercase. Write the results to "uppercase.txt" .
     1. When writing to file, place a blank space after each word.