**ITEC 136 Homework 7 Name: \_Danielle Hooven\_\_\_\_\_\_\_**

1. **[10 points]** Develop a program that asks the user to enter a text. The program should analyze the text and print out unique letters, in alphabetical order, with the percentage information of each letter. Case should be ignored. Write a function to analyze the text string. No global variables are used in the function. Function parameters must be used.  
     
   **Hint:** You can convert all letters into lowercase before processing.  
     
   A sample run of the program might look this. Show one decimal place percentage:

|  |
| --- |
| Please enter a sentence: This is String  g 8.3% h 8.3% i 25.0%  n 8.3% r 8.3%  s 25.0%  t 16.7% |

1. **[10 points]** Modify your first program to print count of the words instead of percentage of the letters. In this exercise you will get your input from a file. Case should be ignored. Write functions to analyze the words in file.

**Hint**: If the word contain punctuation mark or other symbols, remove those symbols. Write a function to keep only the alphabets in the text string to help with counting the words.

A sample run of the program might look like this:

|  |
| --- |
| Please enter a file: data.txt  a 8 about 1 after 1 all 2 always 1 and 9 are 1 asked 1 balance 1 bank 1 be 2 because 3 began 1 better 1 between 1 by 1 can 2 cannot 1 change 3  ... |

data.txt

|  |
| --- |
| My mentor Earl Shoaff taught me that it's not what happens that determines the major part of our future, because what happens, happens to us all. Instead, he taught me that the key is what we do about it. If we start the process of change by developing a plan, doing something different the next year than we did the previous year, it won't matter how small those efforts start. Start doing different things with the same set of circumstances — the ones we've always had and cannot change — and see what miracles occur. If we start the miracle process and change ourselves, then everything changes. And here's what is interesting: The difference between failure and success is subtle.  ...  Remember that your plan is the roadmap for how you are going to get to your goals, so you have to have them. Of all the things that changed my life for the better (and most quickly), it was learning how to set goals. Mastering this unique process can have a powerful effect on your life, too. I remember shortly after I met Mr. Shoaff, he asked me if I had a list of my goals, and of course I didn't. He suggested to me that because I lacked a set of clearly defined goals that he could guess my bank balance within a few hundred dollars... and he did! Well, Mr. Shoaff immediately began helping me define my view of the future, my dreams. He taught me to set goals because it is the greatest influence on a person's future and the greatest force that will pull a person in the direction that they want to go. The future must be planned, well designed to exert a force that pulls you toward the promise of what can be.  <https://www.success.com/article/rohn-it-only-takes-6-steps-to-plan-your-success> |

1. **[5 points]** Weekly Learning and Reflection  
   In two to three paragraphs of prose (i.e. sentences, not bullet lists) using APA style citations if needed, summarize and interact with the content that was covered in the introductory videos provided for this course. In your summary, you should highlight the major topics, theories, practices, and knowledge that were covered. Your summary should also interact with the material through personal observations, reflections, and applications to the field of study. In particular, highlight what surprised, enlightened, or otherwise engaged you. Make sure to include at least one thing that you’re still confused about. In other words, you should think and write critically not just about what was presented but also what you have learned through the session. Feel free to ask questions in this as well since it will be returned to you with answers.