**ITEC 136 Homework 6 Name: \_\_Danielle Hooven\_\_\_\_\_\_**

1. **[10 points]** Develop a program that reads students’ grades from a file named “studentdata.txt’, and writes their names and average into a new file named “studentaverage.txt’. Round the numbers to the closest integer.  
   The following sample file called studentdata.txt contains one line for each student in an imaginary class. The student’s name is the first thing on each line, followed by some exam scores. The number of scores might be different for each student.

studentdata.txt sample file content

|  |
| --- |
| Joe 10 65 80 90 100 Bill 83 76 69 72 Sue 98 72 77 84 52 97 94 91 99  Grace 82 21 75 90 98  ... |

studentaverage.txt sample file content

|  |
| --- |
| Joe 69 Bill 75 Sue 85 Grace 73  ... |

1. **[10 points]** Please develop a program to help you crack the following secret message. For the encryption we have used simple Caesar cipher. You can find more information on <https://en.wikipedia.org/wiki/Caesar_cipher>. Write a function to decrypt the message. The function must have offset value, input file and output file parameters. The offset value is the number n as described in the wiki. No global variables are used in the function. Function parameters must be used.

mysterysample.txt file content:

|  |
| --- |
| Yvccf kyviv! Kyv bvpj kf kyv yfljv riv yzuuve leuvi kyv wcfnvi gfk. |

messagesample.txt file content:

|  |
| --- |
| Hello there! The keys to the house are hidden under the flower pot. |

After you develop your program, read the mystery.txt and output the original message into message.txt

**Hint**: Use % operator where needed. Only decrypt the alphabets. Leave non-alphabet as is.

mystery.txt file content:

|  |
| --- |
| Uzjtzgczev zj kyv sizuxv svknvve xfrcj reu rttfdgczjydvek.  Dfkzmrkzfe zj nyrk xvkj pfl jkrikvu. Yrszk zj nyrk bvvgj pfl xfzex.  Pfl ufe'k nrek kf cffb srtb reu befn pfl tflcu yrmv ufev svkkvi. |

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.