**Group HW: Text File Analysis**

You fill find a file called sample.txt on Oncourse.

Your mission will be to do the following:

1. (10 points) Write a program that loads this file in read mode, reads its content, and closes the file. Use exception handling to catch any errors.

2. (20 points) Compute the letter and punctuation distribution in the file. That is, output the number of a’s, the number of b’s, etc. and the number of commas, dashes, and periods. Ignore case when computing this, so ‘A’ and ‘a’ are the same letter. Use lists.

3. (20 points) Compute the number of words in the file. A word is something that has a single space to either side of it (or only to one side if it starts or ends a sentence), ignoring punctuation. So this sentence: “It was a very nice day, he said.” has 8 words in it.

4. (15 points) Compute the most frequently occurring word. Use a dictionary.

5. (15 points) Output all of the data you’ve computed to a file called “statistics.txt”, and format it nicely to be human-legible. Use exception handling to catch any errors.

6. (20 points) Use functions appropriately. Each major operation should be in a separate function.

**Submission**

Upload your program (.py) to Oncourse under Assignments -> Assignment 1 (Group) as a ***.py file***. Name your file as ***YourUsername\_A1\_group.py***

e.g. If I were to upload, it would be johfdunc\_A1\_group.py

Include the following information as a comment at the top of the file you submit:

 Your name

 Your group number

Make sure you submit a copy of the I211 Homework Team Feedback Form (found on Oncourse). You must submit a copy of this form with every homework or lose 50% of your grade!

**Each member of the group must submit their own copy of the homework!**

Test your code thoroughly!