**Assignment 1: 100 Points**

Your task in this assignment is to write a python program that accepts as input a plain text newspaper article and returns the number of *paragraphs*, *sentences*, and *words* contained in the article.  You should try to be appropriately modular and forward-looking in this homework, as you may want to reuse the code in future assignments.

Use the file 10fitness.txt (in D2L) as a development file. Try not to fit your code too closely to this single example.  Try to generalize (a bit) from what you encounter in it.

You may use the re and sys modules in your program. Your program should take in the file to be analyzed as a command line argument. In other words, I should be able to run your program with any plain text newspaper article by typing at the command line:

python <lastname\_firstname>\_PA1.py <newspaperfilename>.txt

Your output should be formatted as follows:

Paragraphs: <count in digits>

Sentences: <count in digits>

Words: <count in digits>

**What to Turn In**

I will post a test file shortly before the due date.  Put in dropbox:

1. Your code as <lastname\_firstname>\_PA1.py (e.g., brown\_susan\_PA1.py)

2. A short report (500-1000 words) of what you did and all the various assumptions you made (e.g., how did you define a word?). Include the result of running your code on the development file and the test file.  As part of this description, you should discuss how you think a system such as yours should be evaluated.  This report should be <lastname\_firstname>\_PA1\_report.pdf.

This is due on February 3 by 11:30 p.m.