**Homework 12**

**Due: Sunday (see Syllabus)**

**Points: 40**

**Instructions**

In this exercise you will write a Perl program to analyze a text passage contained in a file.

**Specifications**

1. Your program may use a constant file name (which you manually change each run) or it may request a file name from the user.
2. If the file does not exist, an appropriate message should be displayed, and the program should terminate.
3. Your program should read all the words from the .txt file and process them. How you read and process the words is up to you – all at once, one line at a time, one word at a time, whatever.
4. Your program must remove all punctuation.
5. Your program must change all words to lower case.
6. Your program must sort the word collection (list, array, whatever) into reverse alphabetic order.
7. Your program must display all the unique words that were read – your output should not contain any duplicated words.
8. Your program must display 9 words per line, left-justified, in a tabular form. Your code should determine the minimum width for words in the display (see the sample output).
9. Your program must report the number of unique words contained in the passage and the number of duplicated words that were removed (see the sample output).
10. Your program must make use of functions where appropriate.

Run your program several times using different inputs – sufficient to demonstrate that your program meets all the assignment requirements. For your submission, you must use each of the three .txt files specified below. Capture a screen shot of each run and paste them into an MS Word document. Place a caption above each image.

**Submit the Perl .pl file (lastname\_hw11.pl) containing your program and the MS Word document** **to your instructor using the appropriate Assignment Submissions link.**

Attach: ***Cremation.txt***

***The Shooting of Dan McGrew.txt***

***The Cremation of Sam McGee.txt***

**Sample Output**

**Analysis of *Cremation.txt***

Text

Description automatically generated

**Analysis of *The Shooting of Dan McGrew.txt***

Graphical user interface, text

Description automatically generated

**Analysis of *The Cremation of Sam McGee.txt***

Table

Description automatically generated with medium confidence