CS571: Lab 5 (contd) and Lab 6

September 21, 2021

Submit screenshots of the output and code as a PDF file on Moodle. Assignment is due by **29 Sept 2021.**

1. Compile the `StringProcess` program described in the class and generate an executable program. Repeat the demo shown in the class. Process a list of strings stored in a text file and display the output.

2. You are given a text file `hound.txt`. Use the `StringProcess` program to compute the length of every word in `hound.txt`. A word is defined as a set of characters ending with a space or newline. Ignore punctuation symbols. Write Python wrappers as required.

3. **Matlab:** If you have access to Matlab, do the following. Use Matlab's `magic` function to print a magic square of size n, where n is specified by the user. Call Matlab from within a Python program. You can start Matlab with the `-batch` option.

4. An input file is given. The file has several integers in each line, separated by space. Sometimes, there are illegal characters. Find the sum and the mean of all the integers in each line, ignoring the illegal characters. Use appropriate `try except` blocks in your code. You must use at least one exception handler for IO errors, and another one for illegal characters. Try with sample files `input_a` and `input_b`.