

## COP 4020: Programming Languages

Spring 2019

### Project 1

#### Instructions

- **Submission Deadline: Friday, February 22, 2019, 11:59pm.** Submit your assignment through Canvas. Write a separate lex file for each problem. Zip all the files together and submit through Canvas
- This is an individual project and not a group project. You are supposed to work on your own for this project
- Total points possible: 20

**Question 1.** Write a lex program for each of the following. You can use the “linprog” server for your implementation – it has Lex installed in it.

- a) To print the number of words in a text file. Test your code on the file “test\_part\_a.txt” (**5 points**)
- b) To print the longest word (and the number of characters in it) in a file. Test your code on the file “test\_part\_b.txt” (**5 points**)
- c) To print the number of vowels and consonants in a file. Test your code on the file “test\_part\_c.txt” (**5 points**)
- d) To print the number of positive and negative integers and real numbers in a file. Test your code on the file “test\_part\_d.txt” (**5 points**)