CS 358 Compiler Techniques Lab
Apr-May 2021
Lab Assignment 2: LEX and YACC
Marks: 24+6
This assignment can be done in groups. You can form CS 308 Team.
Start Date: 01.05.2021
Submission Deadline: 06.05.2021 10:00 am

Question 1 [Marks: 6]: Write a LEX code that replaces a character [a-zA-Z] with another character. Initially use any random number between 1 to 5 e.g. 2. Now, whenever you come across the first alphabet in your input, that character should be replaced with another character that is 2 places away from it in alphabetical order e.g. If the first character is 'm' then it should be replaced with 'o'. The second character should be replaced with the character 3 places away from it, the third character should be replaced with the character 4 places away from it and so on. Use one input file and one output file. Once the count crosses 25 it should start from 1.

Question 2 [Marks: 6]: Write a LEX - YACC code to recognize a string of the form, any number of As followed by any number of Bs (e.g., AA....ABB...B).

Question 3 [Marks: 6]: Write a LEX code to take input from text file and count the number of characters.

Question 4 [Marks: 6]: Write a LEX program to count the number of comments in a given C program file.

Please plan to submit files as a **single zip file** through Google Classroom. You should name your file as your **RollNumbers_GroupID.zip**. Your submission should be one zip file comprising of the following:

1. Your code for each question
2. A demo explaining your code, code logic, input, and output