

# CS 358 Compiler Techniques Lab

## Assignment 6

Maximum Marks: 60

Start Date: 19.03.2024 02:30 pm

Submission Deadline: 25.03.2024 11:59 pm

### Instructions:

1. This assignment must be done individually.
2. *For late submissions, 10% is deducted for each hour late after an assignment is due.*
3. You need to submit your code and document in Google Classroom.
4. You should submit only one zip file containing your code and document (ReadMe). You should name your file as your RollNumbers\_name.zip.

**Question 1 [Marks: 20]:** You need to build a simple Calculator using LEX and YACC.

For Example- Input:  $2+2*3$

Output: 8

**Question 2 [Marks: 20]:** Write a LEX (and YACC) program that can take c program file as an input and can check if there are balance parenthesis ( ) and { } or not?

For Example- Input: hello world C program file (or any C program file)

Output: Parenthesis are balanced

Or Parenthesis are not balanced

**Question 3 [Marks: 20]:** Write a LEX (and YACC) program to identify following helping verbs: {am, is, are, was were, being, been, be, have, has, had, do, does, did, will, would, shall, should, may, might, must, can, could} in a sentence.

For Example- Input (from terminal): you are a nice person

Output: you: is not a helping verb

are: is a helping verb

a: is not a helping verb

nice: is not a helping verb

person: is not a helping verb