Indian Institute of Technology Roorkee
Department of Computer Science and Engineering
CSN-362: Compiler Laboratory (Spring 2024-2025)

Lab Assignment-5 (L5)   **Date: 18 Feb 2025**   **Duration: 3 hrs**

Problem Statement 1:
Write a program for CALCULATOR to evaluate an arithmetic expression with parentheses, unary and binary operators using Flex and Yacc (LEX and YACC tool).

Output:
$ lex calc.l
$ yacc -d calc.y
$ cc y.tab.c lex.yy.c -ll -ly -lm
$. / a . out
Enter the Expression: (5 + 4) * 3
Answer: 27

Submission folder P1 should contains:
 1. Source code file.
 2. Snapshot image files for at least 4 testcases after running the code.

Problem Statement 2:
Write a program that reads a file named "text.txt" to read grammar. Epsilon is represented by the symbol "^". The program considers LL(1) to be the input grammar and constructs the LL(1) parsing table and then create the parse tree from it for a input string. Hence, simulate LL(1) parsing.

Submission folder P2 should contains:
 1. Source code file
 2. Text.txt files for different grammars.
 3. Snapshot image files showing the outputs on the console after running the code.