Compiler Design Lab (18CS63) Programs (LAB TEST and SEE)

- Program 1:
  - Write a LEX program to count number of words, lines, characters and whitespaces in a given paragraph.
  - Write a YACC program to recognize strings of the form $a^n b^{n+m} c^m$, n,m>=0.
- Program 2:
  - Write a LEX program to count number of Positive and Negative integers and Positive & Negative fractions.
  - Write a YACC program to validate and evaluate a simple expression involving operators +,- , * and /.
- Program 3:
  - Write a LEX program to count the number of comment lines in a C Program. Also eliminate them and copy that program into a separate file.
  - Write a YACC program to recognize a nested (minimum3levels)FOR loop statement for C language.
- Program 4:
  - Write a LEX program to recognize and count the number of identifiers, operators and keywords in a given input file.
  - Write a YACC program to recognize nested IF control statements (C language) and display the number of levels of nesting.
- Program 5: Write a YACC program to recognize Declaration statement (C language) and display the number variables declared .

  Variable can be any basic data type or array type

  Example int a[10],a,b,c;

- Program 6: YACC program that reads the C statements for an input file and converts them in quadruple three address intermediate code.
- Program 7: Write a YACC program that identifies the Function Definition of C language.
- Program 8: Write a YACC program that generates Assembly language (Target) Code for valid Arithmetic Expression.