1. LEX Programming

Lex is a UNIX utility. It is a program generator designed for lexical processing of character input stream. Lex generates C code for lexical analyser. It uses the **patterns** that match **strings in the input** and converts **the strings** to **tokens.**

Installation of LEX in Ubuntu

1. Open a terminal. To do this, use the keyboard shortcut (Ctrl + Alt + T).
2. To install Lex (Flex), use the command:

sudo apt install flex

Steps in writing LEX Program

1st Step- Using **gedit** create a file with extension **l**. For Example- **program.l**

2nd Step- **lex program.l**

3rd Step- **cc lex.yy.c -ll**

4th Step- **./a.out**

Structure of LEX source program

{definitions}

%%

{rules}

%%

{user subroutines/code section}

2. YACC Programming

YACC provides a general tool for imposing structure on the input to a computer program. The input specification is a collection of grammar rules. The name is an acronym for **"Yet Another Compiler Compiler"**. YACC generates the code for the parser in the C programming language.

Installation of YACC in Ubuntu

1. Open a terminal. To do this, use the keyboard shortcut (Ctrl + Alt + T).
2. To install Lex (Flex), use the command:

sudo apt install flex

Steps in writing YACC Program

1st Step- Using **gedit** create a file with extension **y**. For Example- **program.y**

2nd Step- **lex program.l**

3rd Step- **yacc -d program.y**

4th Step- **cc y.tab.c lex.yy.c -ll**

5th Step- **./a.out**

Structure of YACC source program

{definitions}

%%

{rules}

%%

{user subroutines}