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ASSIGNMENT 7

Aim : Write a program to implement calculator using LEX and YACC

Objective : To understand the process of lexical analyzer and parsing through tools such as LEX and YACC.

Theory : <u>Lexical Analyzer</u> — The action of scanning source program into proper syntactic classes is known as lexical analysis

The goals of parsing are to check the validity of a source string and to determine its syntactic structure

<u>Bottom-up Parsing</u> : A bottom up parser constructs a parse tree for a source string is valid if it can be reduced to 's' through a sequence of reductions. The source string is valid if it can be reduced to 's' the distinguished symbol of grammar G.

<u>Top-dow parsing</u> : To derive the matching source string through sequence of derivations. Starting with distinguished symbol of G.

<u>Conclusion</u> : Calculator was implemented using LEX and YACC tools.