LEX Program

Name: Kajal Sunil Pagare
Rollno: 26 Div: B
Class: TE.

Aim: Design Lex program for to generate token of given input file.

Problem statement: write a program using Lex Specifications to implement lexical analysis phase of compiler to generates token of subset of Java program.

Pre-requisites - LEX110, LEX120, LEX130, LEX140, LEX160, 250

~~System~~ Software Requirements -

Sr.No	Facilities requirement	Quantity.
1	System	1
2	o/s	Ubuntu.
3	s/w name	LEX Tool

Hardware Requirements - No.

Objectives - 1. To understand lex concept
2. To implement lex program.

2. To Study about lexa & Java.
3. To know importances about lexical Analyzer.

Theory :

- lex stands for lexical Analyzer. lex is a tool for generating scanner. Scanner are program that recognize lexical Pattern text.
- These lexical Pattern are defined in a Particular system. A matched regular expression may have an associated action.
- This action may also include returnings a tokens. When lex received input in the form file or text, it takes input one characters at time and continues util a pattern is matched, then lex perform the associated action.

Regular Expression in Lex -

A Regular expression is a pattern description using a meta language. An expression is made up of symbols.

Programming in Lex -

Programming in lex can be divided into three steps 1. Specify the pattern -associated actions in a form that lex can understand.

2. Run lex over this file to generates C code for scanner
3. Compile And link the c code to produce the executable Scanner.

```
.....definitions.....
%%
.....Rules.....
%%
.....Subroutines.....
```

Input to lex is divided into three sections with %%. dividing the session.

- Conclusion → Thus, we have Studied lexical Analyzer and implemented an application for lexical Analyzer to perform Scan the program and generates token of subset of java.