Roll No: 17

# 5th Assignment (GrpB)

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**Aim :** Design a lex Program for to generate token for given i/p file

**Problem Stat :** WAP using lex specification to implement lexical analysis phase of compilee to generate tokens for subset of java prog.

**Pre-requisite:** Lex 110, Lex 120, LEX 130, LE x 140, LEX 160, 250

**S/w requirement :** OS Ubuntu, S/w LEX tool (Flex)

**Theory :-**

① LEX :- Stands for lexical analyzer
- Lex is tool for generating scanner
- scanner are programs that recognize lexical pattern in text
- This lexical patterns are defined in particular syntax
- A Matched reg expression may have a associated action
- when lex receives i/p in form of text on file it takes i/p char at a time and continues until a pattern is matched, then lex perform the associated action

② Regular expression in lex :-
- It is pattern descripter using a meta lang
- An exp is made up of symbols normal fo symbols are char and no but these are other symbols that have special meaning in lex

Scanned by CamScanner

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## ⑤ Programming in lex :-

It can be divided in 3 steps

1) Specify the pattern associated action in the form that lex can understand
2) Run lex over the rule to generate code for the scanner
3) Compile and link the code to provide the executable scanner

A lex program is divided into 3 sections

1) It has global C and lex declaration
2) It has patterns (coded in C)
3) It has supplement C function

### Conclusion :-

Thus we have studied lexical analyser and implemented an application for lexical analyzer to perform scan the program and generate token of subset of Java.

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