1. Detect the keyword from a given string when you are given a programming statement.

e.g.

input : **int var = 50;**

output: **got a keyword : int**

1. Write a program to determine whether the Given Input is Numeric Constant or Not. Take real/ float value as an input.

Input: 75.89

Output: numeric constant

1. Detect the operator from a given string when you are given a programming statement.

Input : a + b = c

Output: +, =

1. Detect the identifier from a given string when you are given a programming statement.

e.g.

input : **int var=50;**

output: **got an identifier: var**

1. To identify tokens from a programming statement try to use ‘,’, ‘;’, ‘operators’ etc for real-time environments.

input : **int var=50;**

output:

**int: keyword**

**var: identifier**

**=: operator**

**50: numerical constant**

**;= splitter or delimiter**

input : **int var(int, int);**

**Limitations of Lab-4 program-1:**

1. Cannot work with numeric constants.
2. Worked with only the first brace/first parenthesis
3. If we start with closing parenthesis and end with starting parenthesis , it works (which is not accurate)

**Limitations of Lab-4 program-2:**

1. Worked with one digit only.
2. Did not maintain operator precedency.

**Note-1**: practice on file read, write, seek, tell, append etc.

**Note-2:** These are just samples. Please practice and think all the programs that have been defined in the lab documents (lab practice, lab tasks, home tasks).

**Syllabus for Mid Lab Test**: lab document 2,3 and 4.

**Sample program input:**

**struct student{**

**}**

**int main(){**

**int a,b,c;**

**a = b + c;**

**a++;**

**}**

**How many unique identifier are there in the above program?**

**How many unique keywords are there in the above program?**