```
srihari@LAPTOP-AJMTFS87: ~/compiler_design/week2
 rihari@LAPTOP-AJMTFS87:~/compiler_design/week2$ ./a.out
Enter !!! to stop
we are 123 := ++ _srihari char!!!
Identifier we
Whitespace
Identifier are
Whitespace
Number 123
Whitespace
Assignment operator =
Whitespace
Operator ++
Whitespace
Identifier _srihari
Whitespace
Keyword char encountered
                                              identifier = 3 whitespace = 6Whitespace
Number = 1
               Operator=1
                              assign = 1
 rihari@LAPTOP-AJMTFS87:~/compiler_design/week2$ cat q1.1
#include<stdio.h>
#include<string.h>
#include<stdlib.h>
int a=0,b=0,c=0,d=0,e=0;
number [0-9]+
op [-|+|*|/|^|%]+
assign :=
letter [a-zA-Z_]
digit [0-9]
id {letter}({letter}|{digit})*
ws [ \t \n]
"int"|"float"|"for"|"while"|"continue"|"break"|"char"|"switch" {printf("Keyword %s encountered\n",yytext); }
{number} {a++;printf("Number %s\n",yytext);}
{op} {b++;printf("Operator %s\n",yytext);}
{assign} {c++;printf("Assignment operator =\n");}
{id} {d++; printf("Identifier %s\n",yytext);}
{ws} {e++;printf("Whitespace\n");}
"!!!" { printf("Number = %d \t Operator=%d\t assign = %d\t identifier = %d\t whitespace = %d",a,b,c,d,e);}
int yywrap(void){ }
int main(){
       printf("Enter !!! to stop\n");
       yylex();
       return 1;
 rihari@LAPTOP-AJMTFS87:~/compiler_design/week2$ 🔠
                                                                                                                                                                     ^ □ □ □ □ (10) (7. ENG 20-08-2020
```

```
1. Write a Lex program to find and court the following tokens from imput: Identifier, Number, whitespaces assignment of tokens from imput: Identifier, Number, whitespaces assignment
                           Week-2
2018/2020
Thursday
      Symbol, aperator
     #include/stdio.4>
     #include (string. 4)
    It include (Stallib. h)
     art a=0, b=0, c=0, d=0, e=0)
                                                    My Jak Ja
    number [0-9]+
     OP [-1+1+1/1/1/1]+
    assign :=
    letter [a-2A-Z-]
    digit [0-9]
     id { letter3 ({ letter3 | {digit3)"
     ws [ Ith]
    "int" | "float" | "for" | "while" | "Continue" | "break" | Char | Switch"
                  Eprints (" keyword 1.5 encountered in , yytext);
    Inumber 3 {a++; printf("Number 1.5 \n", yytent);)
    Epp > {b++; printf("Operator 1/s/n", yytext); }
    Eassign 3 EC++; printf("Assignment Operator := \n'); }
   gid3 Ed++; printf("Identifier Ysln", yyten t); 3
   Ews 3 {e++; printf("whitespace "n"); 3
   "!!!" { printf ("Number = 1/d | t Operator = 1.d | t assign = 1/d | t
               identifici = 1d It whitespace = 1.d", a, b, c,d,e) 3
   int yywrap (vold) & 3
   int main () { printf("Enter !!! to stop In"); 3
                     yylex (); return 1;
```

OUTAUT

Eviter !!! to estop we are 123 = ++ _sribari char!!!

Identifier we whitespace

Identifier are

Whitespace

Number 123

whitespace

Assignment operator:=

Whitespace

Operator ++

whitespace

Identifier - sribari

whitespace

Keyword char encountered

Number = 1 Operator = 1 assign = 1 identifier = 3 whitepace = 6