**Practical 3**

**Definition:** Write a program to implement lexical analyzer.

**Code:**

#include <string.h>

#include <stdio.h>

#include <conio.h>

void main(){

FILE \*f1;

char ch,str[300][30],str1[300][30],sym[300];

int m=0,j=0,i=0,i1=0,j1=0,flag=0,p=0,q=0;

clrscr();

f1=fopen("sample.c","r");

while((ch=getc(f1))!=EOF){

if(isalnum(ch) || ch=='\_'){

str[i][j++]=ch;

flag=1;

}

else{

if(!isspace(ch)){

sym[m++]=ch;

}

if(flag==1){

str[i][j]='\0';

i++;

j=0;

flag=0;

}

if(ch=='"'){

while((ch=getc(f1))!='"'){

str1[i1][j1++]=ch;

}

str1[i1][j1]='\0';

i1++;

j1=0;

}

}

}

fclose(f1);

for(p=0;p<i;p++){

printf("%s\t",str[p]);

}

printf("\n---------------------------------\n");

for(p=0;p<m;p++){

printf("%c\t",sym[p]);

}

printf("\n---------------------------------\n");

for(p=0;p<i1;p++){

printf("%s\t",str1[p]);

}

getch();

}

/\*

Output

include ctype h include stdio h include conio h include

string h void main char s1 20 printf gets s1

puts s1 getch

---------------------------------

# < . > # < . > # <

. > # < . > ( ) { [

] ; ( " ) ; ( ) ; (

) ; ( ) ; }

---------------------------------

Enter a string:

\*/