Program Code

lex.l

```
%{
    #include<stdio.h>
    #include<stdlib.h>
    #include<string.h>

    int l=0;
    int w=0;
    int c=0;
%}

line [\n]
words [a-zA-Z0-9!@#$%^&*<>/?.()]+

%%
{line} {l++;}
{words} {w++, c+=strlen(yytext);}
%%

int yywrap(){}

void main()
{
    yyin=fopen("test.c", "r");
    yylex();

    printf("\nLINES: %d", l+1);
    printf("\nCHARACTERS: %d",c);
    printf("\nWORDS: %d\n", w);
}
```

test.c

```
#include<stdio.h>
#include<stdlib.h>


//This program was created by sriganash

/*This is an implementation of lexical analyser using the lex
tool. This program was implemented for the compiler lab*/
int a=10;

void main()
{
    int a,b,c;
    a=5;
    b=8;
    c=a+b*a;
    printf("\nc = %d\n",c);
}
```

Output

```
students@pgcse-HP-280-G1-MT:~/Desktop/R7_66/R7_66/2/2$ lex lex.l
students@pgcse-HP-280-G1-MT:~/Desktop/R7_66/R7_66/2/2$ cc lex.yy.c -o lex
students@pgcse-HP-280-G1-MT:~/Desktop/R7_66/R7_66/2/2$ ./lex
                    =; {     ,,;    =;    =;    =+;    "\ = \",;}
LINES: 19
CHARACTERS: 215
WORDS: 48
```