**Write a program using Lex specifications to implement lexical analysis phase of compiler to count no. of words, lines and characters of given input file.**

%{

**#include<stdio.h>**

**int wc=0,nc=0,newline=0,k=0,ss=0;**

%}

%%

[0-9]+ { printf("\nNumber found is %s",yytext); nc++; }

"int"|"void"|"float" |”char” { printf("\nkeyword is found %s",yytext);k++; }

[a-zA-Z]+ { printf("\n word found is %s",yytext); wc++; }

"-"|"+"|"\*"|"/"|"?"|"!" { printf("\n special symbol is %s",yytext);ss++; }

[\n] { newline++; }

%%

int main()

{

Yyin = fopen("input.txt","r");

yylex();

printf("\nNumber of Number found is %d", nc);

printf("\nNumber of word found is %d", wc);

printf("\nNumber of keyword found is %d", k);

printf("\nNumber of special symbol is %d", ss);

printf("\nNumber of line are %d", newline);

return(0);

}

////////////OUTPUT////////////

Running steps

* gcc lex.yy.c -ll
* gurukul@ubuntu:~$ lex abc.l
* gurukul@ubuntu:~$ ./a.out

word found is **hi**

word found is **how**

word found is **are**

word found is **you**

special symbol is **?**

word found is **what**

word found is **are**

word found is **you**

word found is **doing**

special symbol is **?**

Number found is 55

Number found is 44

Number found is 88

Number found is 77

keyword is found float

special symbol is ?

special symbol is \*

special symbol is /

special symbol is \*

special symbol is /

special symbol is +

special symbol is +

special symbol is -

special symbol is -

keyword is found int

word found is your

word found is roll

word found is number

Number found is 25

keyword is found void

Number of Number found is 5

Number of word found is 11

Number of keyword found is 3

Number of special symbol is 11

Number of line are 12gurukul@ubuntu:~$