Write a LEX specification file to take input C program from a .c file and count tthe number of characters, number of lines & number of words.

**Input Source Program: (sample.c)**

#include <stdio.h>

int main()

{

int number1, number2, sum;

printf("Enter two integers: ");

scanf("%d %d", &number1, &number2);

sum = number1 + number2;

printf("%d + %d = %d", number1, number2, sum);

return 0;

}

**Program: (count\_lines.l)**

%{

int nchar, nword, nline;

%}

%%

\n { nline++; nchar++; }

[^ \t\n]+ { nword++, nchar += yyleng; }

. { nchar++; }

%%

int yywrap(void) {

return 1;

}

int main(int argc, char \*argv[]) {

yyin = fopen(argv[1], "r");

yylex();

printf("Number of characters = %d\n", nchar);

printf("Number of words = %d\n", nword);

printf("Number of lines = %d\n", nline);

fclose(yyin);

}

**Output:**

G:\lex>flex count\_line.l

G:\lex>gcc lex.yy.c

G:\lex>a.exe sample.c

Number of characters = 233

Number of words = 33

Number of lines = 10

G:\lex>

