**Question**

Write a LEX/FLEX program that counts total characters, words, and lines from multiple files. The filenames are passed to the program as command-line arguments. Run the program using the provided text files.

**Solution**

%{

#include<string.h>

#include<stdio.h>

int ch = 0, word = 0, line = 0;

int total\_ch = 0, total\_word = 0, total\_line = 0;

%}

%%

[a-zA-Z0-9]+ { word++; ch + = strlen( yytext ); }

. { ch++; }

["\n"] { line++; }

%%

int main(int argc, char \*\*argv)

{

for ( int i = 1; i < argc; i ++ )

{

FILE \*fp = fopen ( argv[i], "r" );

if ( !fp )

{

perror ( argv[i] );

return (1);

}

yyrestart ( fp );

yylex ( );

fclose ( fp );

printf (" %s ", argv[i] );

printf (" \n" );

printf (" Character Counts = %d \n ", ch );

printf (" Words Counts = %d \n ", word );

printf (" Lines Counts = %d \n" , line );

printf (" \n" );

total\_ch + = ch; ch = 0;

total\_word + = word; word = 0;

total\_line + = line; line = 0;

}

if ( argc > 2 )

{

printf ( "Total Of All Files \n" );

printf ( "Total Character Count = %d \n", total\_ch );

printf ( "Total Words Count = %d \n", total\_word);

printf ( "Total Lines Count = %d \n", total\_line );

}

else

printf ( "You Read Just 1 File: Above is the output \n" );

return 0;

}