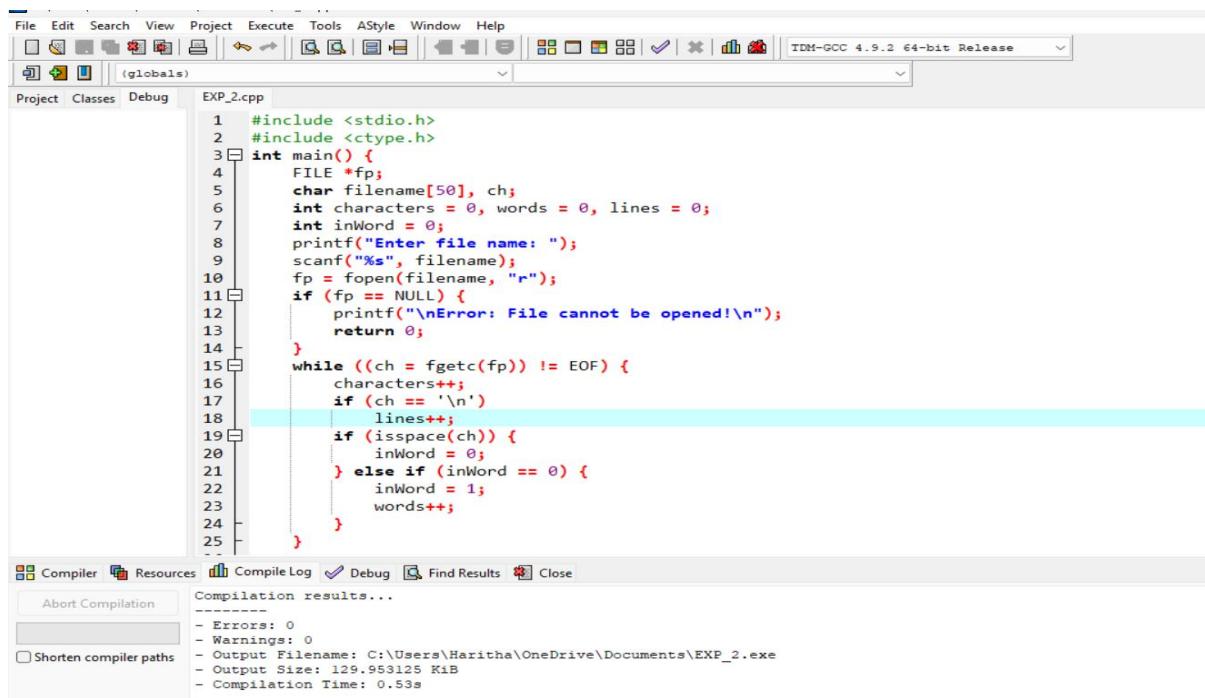


EXPERIMENT-17

AIM:

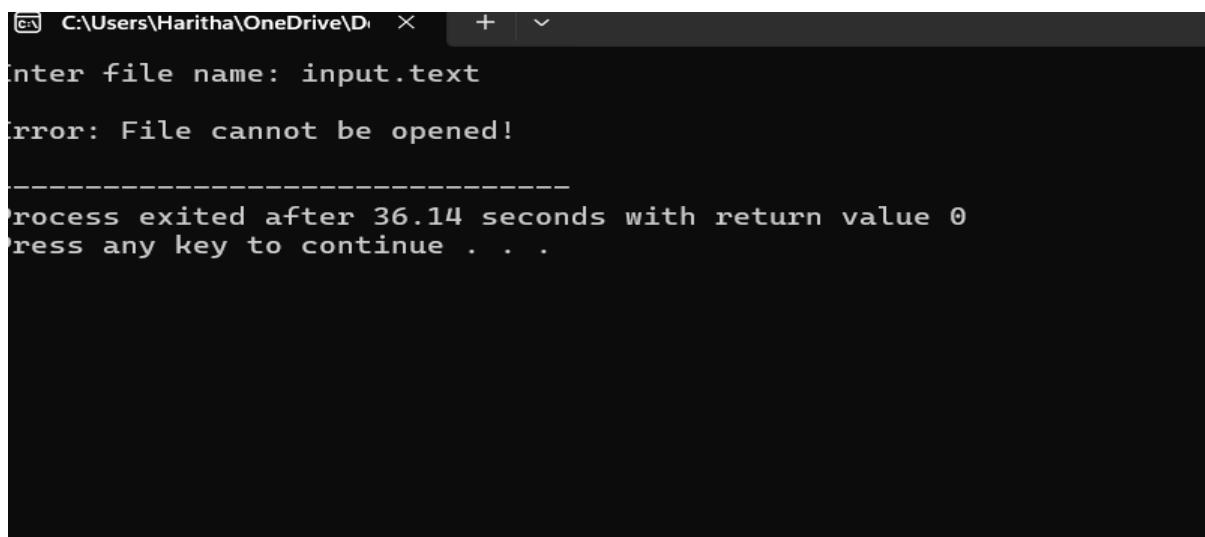
Write a C program for implementing a Lexical Analyzer to Scan and Count the number of characters, words, and lines in a file.

PROGRAM:



```
File Edit Search View Project Execute Tools ASStyle Window Help
File Project EXP_2.cpp
Project Classes Debug
1 #include <stdio.h>
2 #include <ctype.h>
3 int main() {
4     FILE *fp;
5     char filename[50], ch;
6     int characters = 0, words = 0, lines = 0;
7     int inWord = 0;
8     printf("Enter file name: ");
9     scanf("%s", filename);
10    fp = fopen(filename, "r");
11    if (fp == NULL) {
12        printf("\nError: File cannot be opened!\n");
13        return 0;
14    }
15    while ((ch = fgetc(fp)) != EOF) {
16        characters++;
17        if (ch == '\n')
18            lines++;
19        if (isspace(ch)) {
20            if (inWord == 0)
21                inWord = 1;
22            else if (inWord == 1)
23                words++;
24        }
25    }
}
Compiler Resources Compile Log Debug Find Results Close
Abort Compilation
Shorten compiler paths
Compilation results...
-----
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\Haritha\OneDrive\Documents\EXP_2.exe
- Output Size: 129.953125 KiB
- Compilation Time: 0.53s
```

OUTPUT:



```
C:\Users\Haritha\OneDrive\Documents> ./EXP_2
Enter file name: input.text
Error: File cannot be opened!
-----
Process exited after 36.14 seconds with return value 0
Press any key to continue . . .
```