

EXPERIMENT-12

AIM:

Write a C program to construct recursive descent parsing for the given grammar

$E \rightarrow TE'$

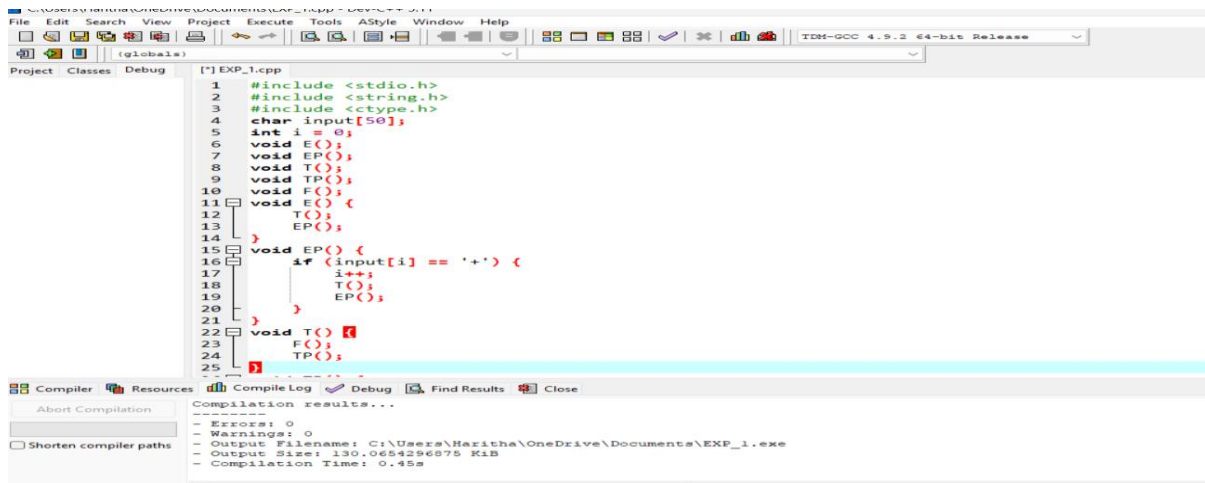
$E' \rightarrow +TE' / \epsilon$

$T \rightarrow FT'$

$T' \rightarrow *FT' / \epsilon$

$F \rightarrow (E) / id$

PROGRAM:

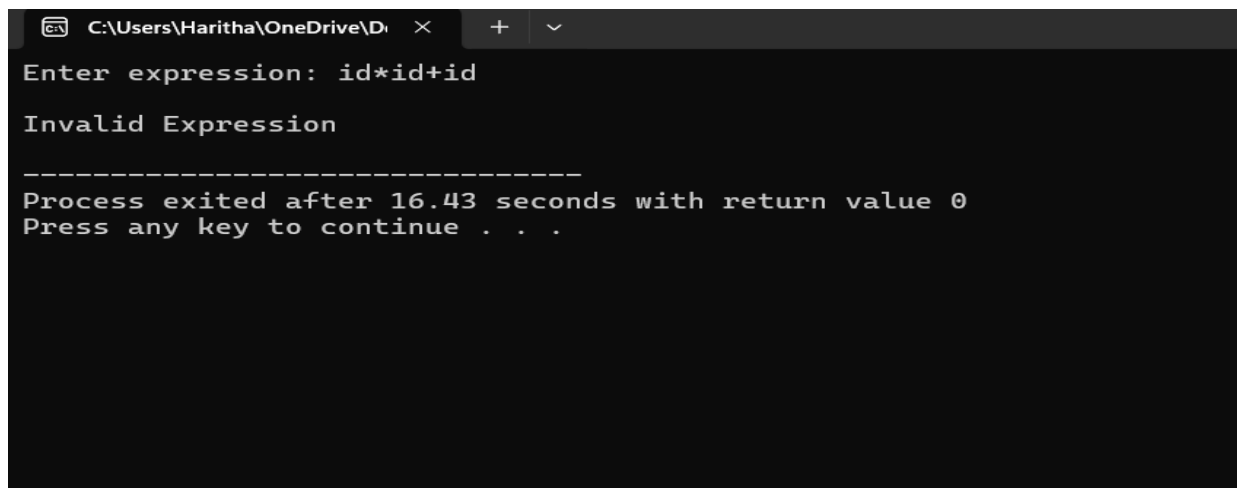


```
1 #include <stdio.h>
2 #include <string.h>
3 #include <ctype.h>
4 char input[50];
5 int i = 0;
6 void E();
7 void EP();
8 void T();
9 void TP();
10 void F();
11 void E() {
12     T();
13     EP();
14 }
15 void EP() {
16     if (input[i] == '+') {
17         i++;
18         T();
19         EP();
20     }
21 }
22 void T() {
23     F();
24     TP();
25 }
```

Compilation results...

- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\Haritha\OneDrive\Documents\EXP_1.exe
- Output Size: 130.0654296875 KiB
- Compilation Time: 0.45s

OUTPUT:



```
C:\Users\Haritha\OneDrive\Documents\EXP_1.exe
Enter expression: id*id+id
Invalid Expression
-----
Process exited after 16.43 seconds with return value 0
Press any key to continue . . .
```