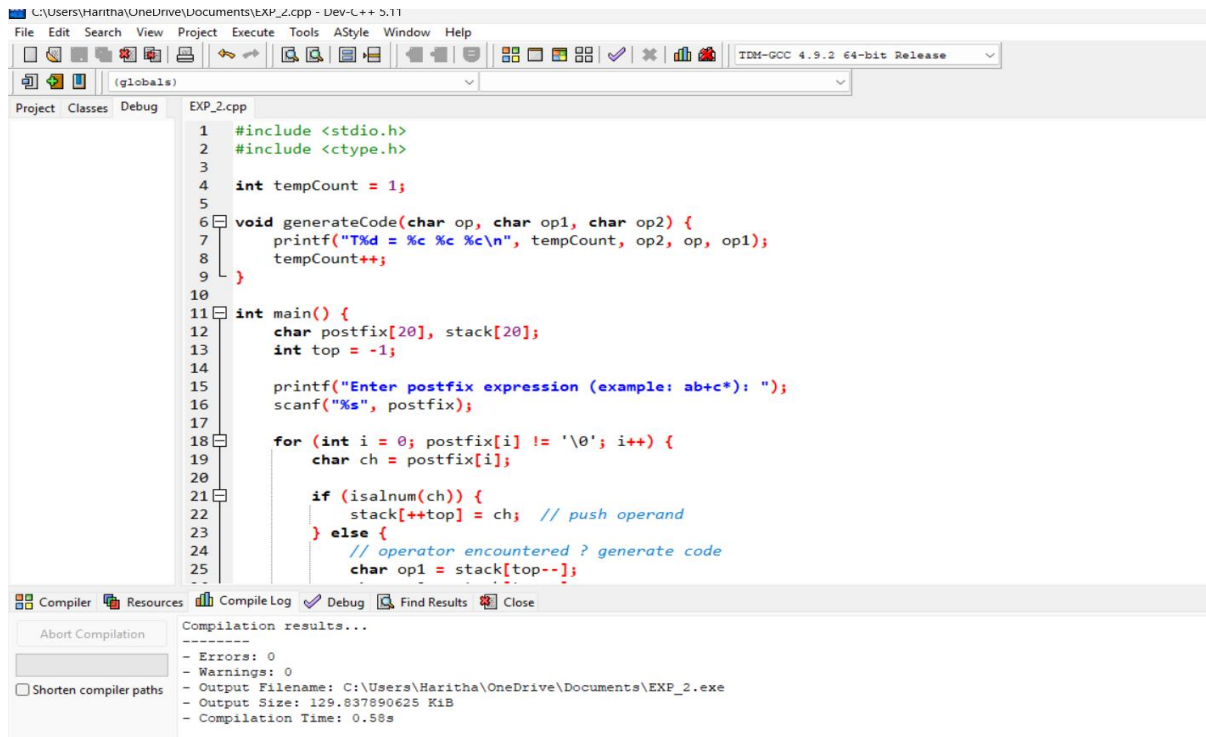


EXPERIMENT-18

AIM:

Write a C program to implement the back end of the compiler.

PROGRAM:

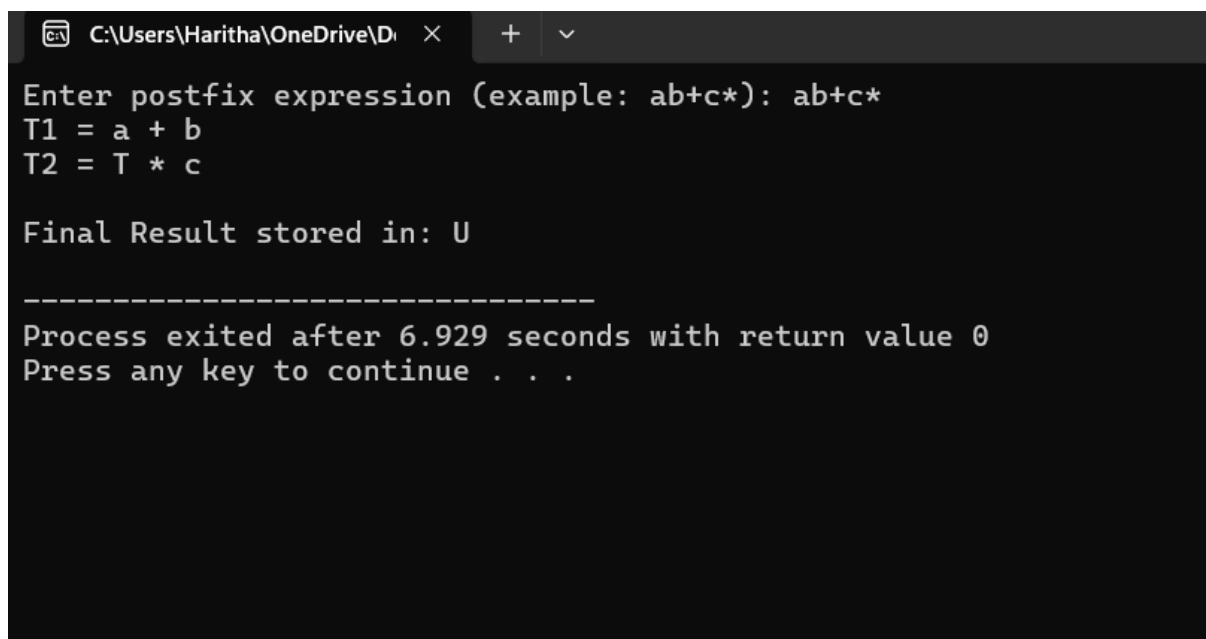


```
1 #include <stdio.h>
2 #include <ctype.h>
3
4 int tempCount = 1;
5
6 void generateCode(char op, char op1, char op2) {
7     printf("T%d = %c %c %c\n", tempCount, op2, op, op1);
8     tempCount++;
9 }
10
11 int main() {
12     char postfix[20], stack[20];
13     int top = -1;
14
15     printf("Enter postfix expression (example: ab+c*): ");
16     scanf("%s", postfix);
17
18     for (int i = 0; postfix[i] != '\0'; i++) {
19         char ch = postfix[i];
20
21         if (isdigit(ch)) {
22             stack[++top] = ch; // push operand
23         } else {
24             // operator encountered ? generate code
25             char op1 = stack[top--];
```

Compilation results...

- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\Haritha\OneDrive\Documents\EXP_2.exe
- Output Size: 129.837890625 KiB
- Compilation Time: 0.58s

OUTPUT:



```
Enter postfix expression (example: ab+c*): ab+c*
T1 = a + b
T2 = T * c

Final Result stored in: U

-----
Process exited after 6.929 seconds with return value 0
Press any key to continue . . .
```