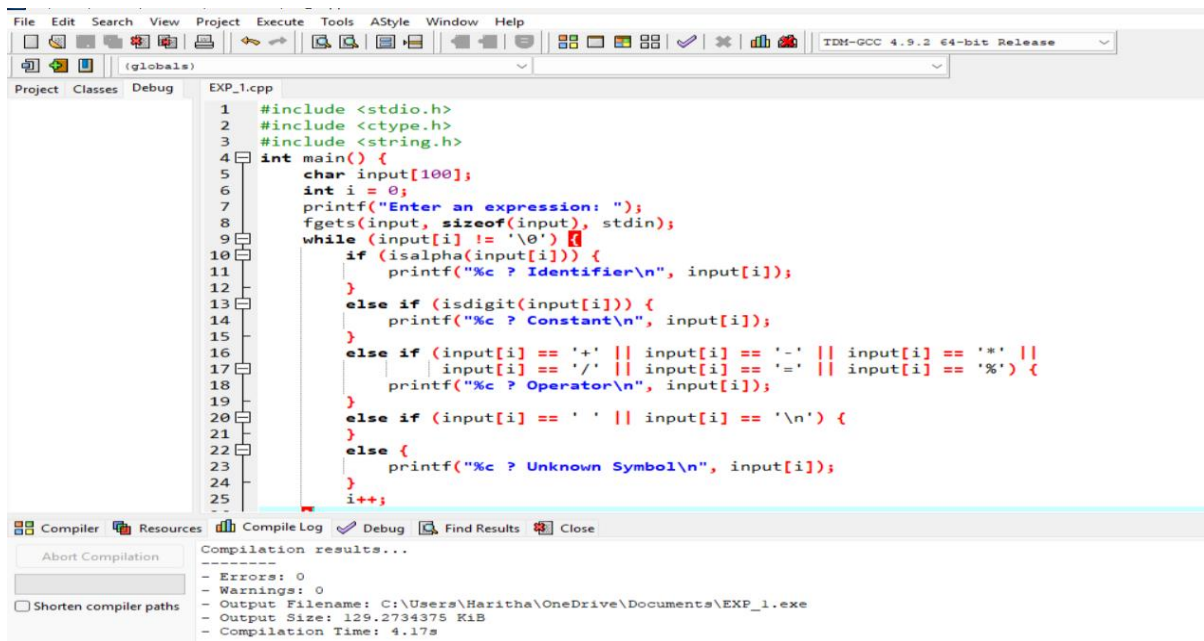


# EXPERIMENT-1

## AIM:

Develop a lexical Analyzer to identify identifiers, constants, operators using C program.

## PROGRAM:

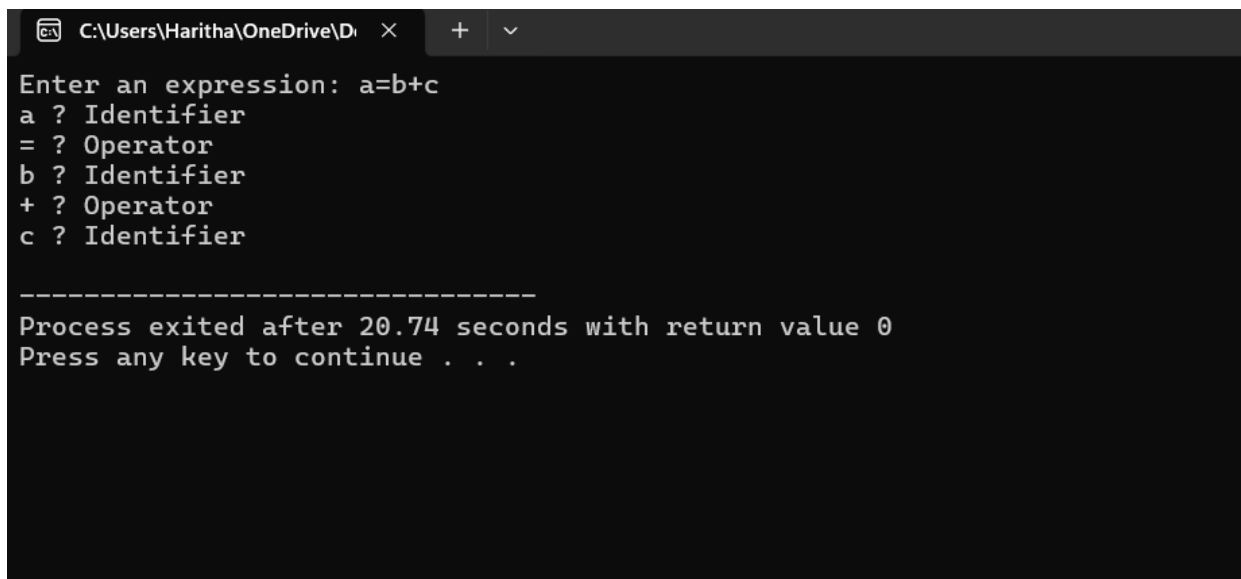


```
1 #include <stdio.h>
2 #include <ctype.h>
3 #include <string.h>
4 int main() {
5     char input[100];
6     int i = 0;
7     printf("Enter an expression: ");
8     fgets(input, sizeof(input), stdin);
9     while (input[i] != '\0') {
10         if (isalpha(input[i])) {
11             printf("%c ? Identifier\n", input[i]);
12         }
13         else if (isdigit(input[i])) {
14             printf("%c ? Constant\n", input[i]);
15         }
16         else if (input[i] == '+' || input[i] == '-' || input[i] == '*' ||
17                 input[i] == '/' || input[i] == '=' || input[i] == '%') {
18             printf("%c ? Operator\n", input[i]);
19         }
20         else if (input[i] == ' ' || input[i] == '\n') {
21         }
22         else {
23             printf("%c ? Unknown Symbol\n", input[i]);
24         }
25         i++;
26     }
27 }
```

Compilation results...

- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\Haritha\OneDrive\Documents\EXP\_1.exe
- Output Size: 129.2734375 KiB
- Compilation Time: 4.17s

## OUTPUT:



```
C:\Users\Haritha\OneDrive\Documents> .\EXP_1.exe
Enter an expression: a=b+c
a ? Identifier
= ? Operator
b ? Identifier
+ ? Operator
c ? Identifier

-----
Process exited after 20.74 seconds with return value 0
Press any key to continue . . .
```