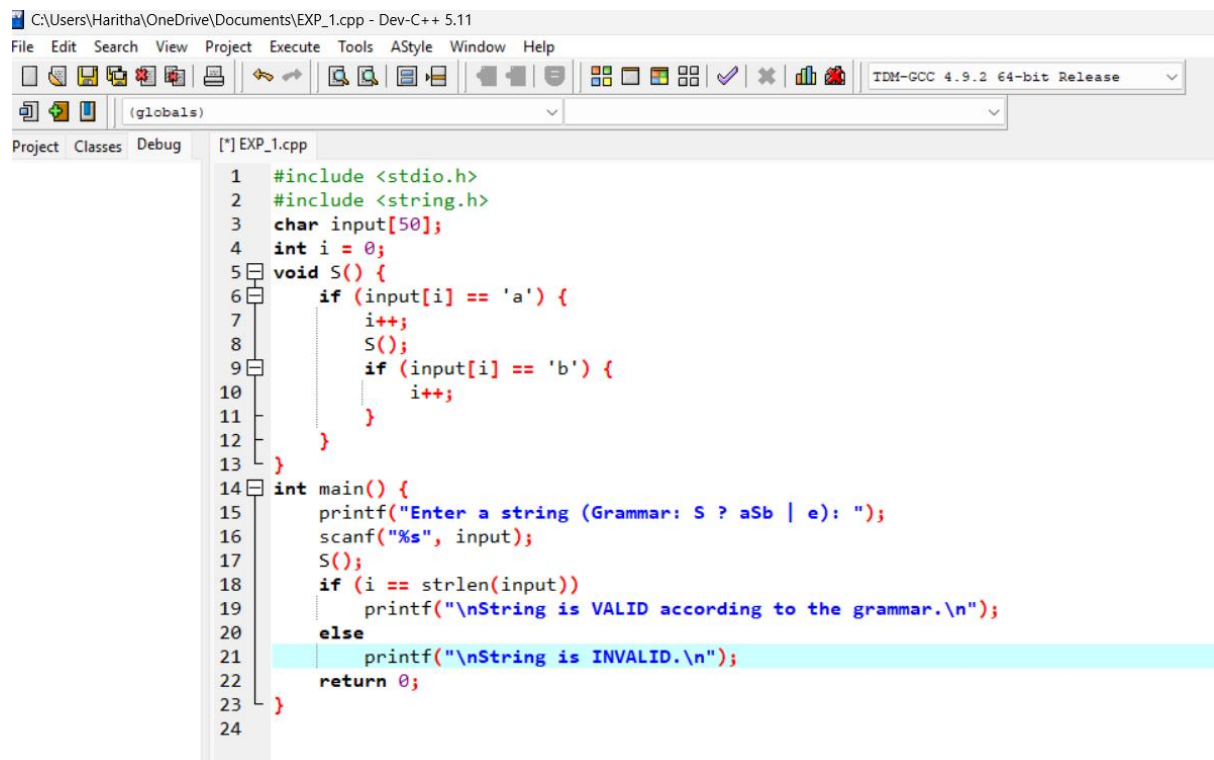


# EXPERIMENT-13

## AIM:

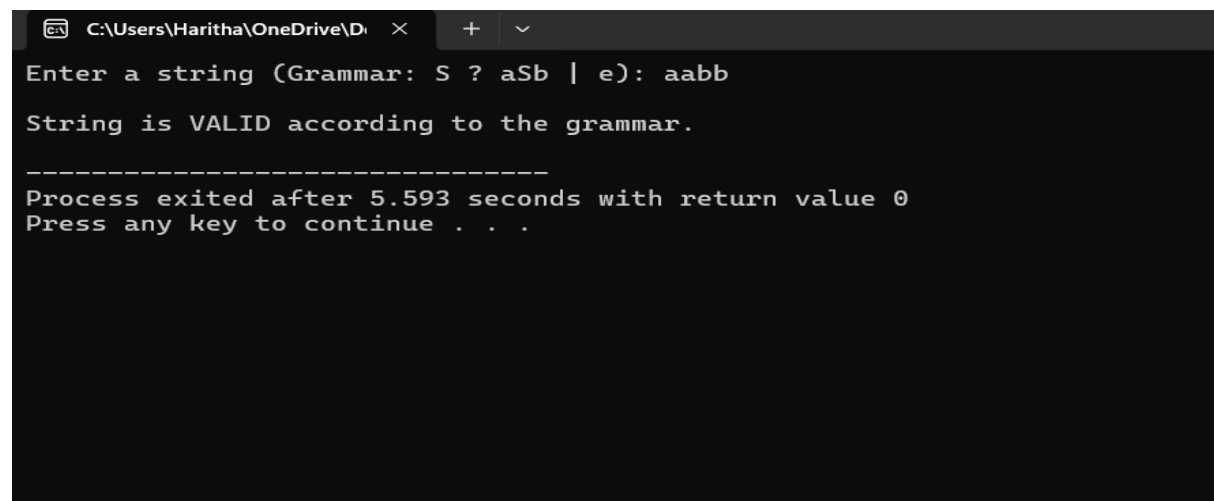
Write a C program to implement either Top Down parsing technique or Bottom Up Parsing technique to check whether the given input string is satisfying the grammar or not.

## PROGRAM:



```
1 #include <stdio.h>
2 #include <string.h>
3 char input[50];
4 int i = 0;
5 void S() {
6     if (input[i] == 'a') {
7         i++;
8         S();
9         if (input[i] == 'b') {
10             i++;
11         }
12     }
13 }
14 int main() {
15     printf("Enter a string (Grammar: S ? aSb | e): ");
16     scanf("%s", input);
17     S();
18     if (i == strlen(input))
19         printf("\nString is VALID according to the grammar.\n");
20     else
21         printf("\nString is INVALID.\n");
22     return 0;
23 }
24
```

## OUTPUT:



```
C:\Users\Haritha\OneDrive\Di... x + v
Enter a string (Grammar: S ? aSb | e): aabb
String is VALID according to the grammar.
-----
Process exited after 5.593 seconds with return value 0
Press any key to continue . . .
```