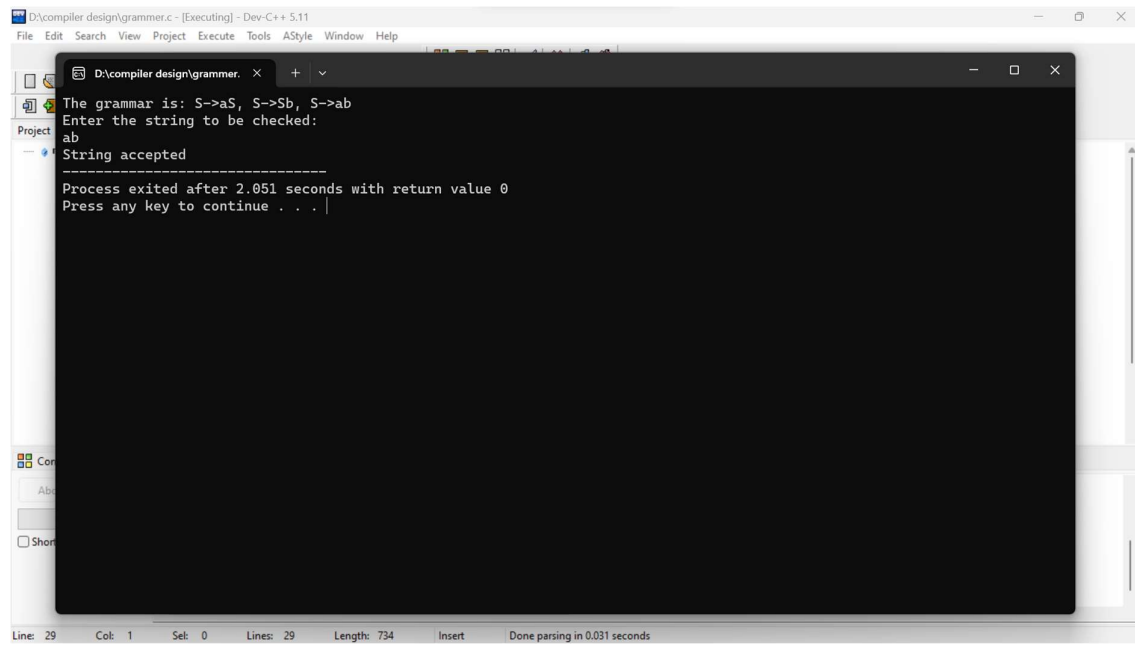


9. All languages have Grammar. When people frame a sentence we usually say whether the sentence is framed as per the rules of the Grammar or Not. Similarly use the same ideology , implement to check whether the given input string is satisfying the grammar or not .

```
#include<stdio.h>
#include<conio.h>
#include<string.h>
int main() {
    char string[50];
    int flag,count=0;
    printf("The grammar is: S->aS, S->Sb, S->ab\n");
    printf("Enter the string to be checked:\n");
    gets(string);
    if(string[0]=='a') {
        flag=0;
        for (count=1;string[count-1]!='\0';count++) {
            if(string[count]=='b') {
                flag=1;
                continue;
            } else if((flag==1)&&(string[count]=='a')) {
                printf("The string does not belong to the specified grammar");
                break;
            } else if(string[count]=='a')
                continue; else if((flag==1)&&(string[count]!='\0')) {
                printf("String not accepted.....!!!!");
                break;
            } else {
                printf("String accepted");
            }
        }
    }
}
```



```
D:\compiler design\grammer.c - [Executing] - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help

D:\compiler design\grammer.c
The grammar is: S->aS, S->b, S->ab
Enter the string to be checked:
ab
String accepted
-----
Process exited after 2.051 seconds with return value 0
Press any key to continue . . .

Line: 29 Col: 1 Sel: 0 Lines: 29 Length: 734 Insert Done parsing in 0.031 seconds
```