

EXP09

Write a C program to check whether a string is grammar or not:

INPUT:

```
#include <stdio.h>
#include <string.h>

int main() {
    char string[50];
    int flag = 0, i;
    printf("The grammar is: S->aS, S->Sb, S->ab\n");
    printf("Enter the string to be checked:\n");
    fgets(string, 50, stdin);
    int len = strlen(string);
    for (i = 0; i < len; i++) {
        if (string[i] == 'a') {
            flag = 1;
        } else if (string[i] == 'b' && flag == 1) {
            flag = 2;
        } else if (string[i] == 'a' && flag == 2) {
            flag = 0;
            break;
        }
    }
    if (flag == 2) {
        printf("String accepted.....!!!!");
    } else {
        printf("String not accepted");
    }
    return 0;
}
```

OUTPUT:

```
C:\Users\koppo\Documents\ < x + v
The grammar is: S->aS, S->Sb, S->ab
Enter the string to be checked:
ab
String accepted.....!!!!
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Process exited after 27.55 seconds with return value 0
Press any key to continue . . .
```