9. Grammar Checking Program

```c
#include <stdio.h>
#include <string.h>
int check(char s[]) {
    int n = strlen(s);
    if (n < 2) return 0;
    int i = 0, j = n - 1;
    while (i < j && s[i] == 'a' && s[j] == 'b') {
        i++;
        j--;
    }
    return (i == j) || (i > j);
}
int main() {
    char s[50];
    printf("Enter string: ");
    scanf("%s", s);
    if (check(s))
        printf("String is valid as per grammar.\n");
    else
        printf("String is NOT valid as per grammar.\n");
    return 0;
}
```

Output:

File   Edit   Search   View   Project   Execute   Tools   AStyle   Window   Help

(globals)

Project   Classes   Debug   [*] exp 9.cpp

```c
1    #include <stdio.h>
2    #include <string.h>
3    int check(char s[]) {
4        int n = strlen(s);
5        if (n < 2) return 0;
6        int i = 0, j = n - 1;
7        while (i < j && s[i] == 'a' && s[j]
8            i++;
9            j--;
10       }
11
12       return (i == j) || (i > j);
13   }
14
```

Compiler   Resources   Compile Log   Debug   Find Results   Close

Abort Compilation

☐ Shorten compiler paths

```
Compilation results...
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- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\Reddy\Downloads\exp 9.exe
- Output Size: 129.298828125 KiB
- Compilation Time: 0.36s
```

Line: 5   Col: 25   Sel: 0   Lines: 27   Length: 515   Insert   Done parsi

C:\Users\Reddy\Downloads\e

Enter string: aaabbbccc
String is NOT valid as per grammar.

Process exited after 6.531 seconds with return value 0
Press any key to continue . . .