Check if two strings match where one string contains wildcard characters

Description

Get two strings as input from the user, first with wildcard characters (* and ?) and second without wildcard characters. Then check whether they match or not.

Input

Ta**nt

Talent

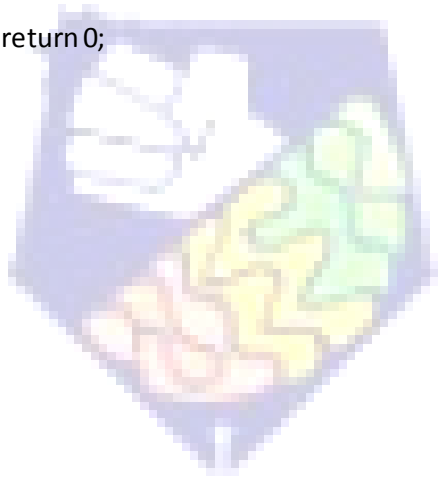
Output

Yes they match

C Program

```
#include<stdio.h>
#include<stdbool.h>
bool checking(char *s1, char * s2)
{
   if (*s1 == '\0' && *s2 == '\0')
       return true;
   if (*s1 == '*' && *(s1+1) != '\0' && *s2 == '\0')
       return false;
   if (*s1 == '?' || *s1 == *s2)
       return checking(s1+1, s2+1);
   if (*s1 == '*')
       return checking(s1+1, s2) || checking(s1, s2+1);
    return false;
}
void testing(char *s1, char *s2)
```

```
{
   checking(s1, s2)? puts(" Yes "): puts(" No ");
}
int main()
{
   char s1[20],s2[20];
   printf("Enter first string with wild characters: ");
   scanf("%s",s1);
   printf("Enter second string without wild characters: ");
   scanf("%s",s2);
   testing(s1,s2);
   return 0;
}
```



C++ Program

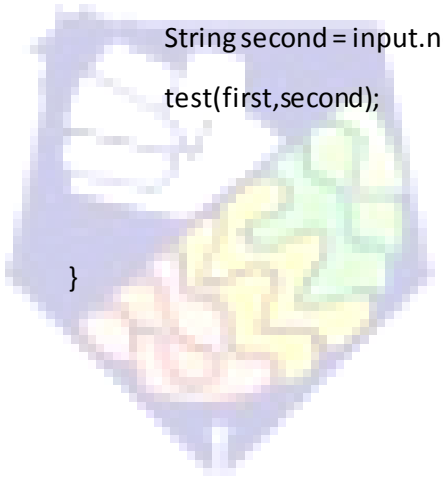
```
#include<iostream>
#include<stdbool.h>
using namespace std;
bool checking(char *s1, char * s2)
{
   if (*s1 == '\0' && *s2 == '\0')
       return true;
   if (*s1 == '*' && *(s1+1) != '\0' && *s2 == '\0')
       return false;
   if (*s1 == '?' || *s1 == *s2)
       return checking(s1+1, s2+1);
   if (*s1 == '*')
       return checking(s1+1, s2) || checking(s1, s2+1);
    return false;
}
void testing(char *s1, char *s2)
{
   checking(s1, s2)? puts(" Yes "): puts(" No ");
}
int main()
{
   char s1[20],s2[20];
   cout<<"Enter first string with wild characters: ";
   cin>>s1;
   cout<<"Enter second string without wild characters: ";
   cin>>s2;
   testing(s1,s2);
   return 0; }
```

Java Solution

```
import java.util.Scanner;
public class Main
{
   static boolean match(String first, String second)
{
   if (first.length() == 0 && second.length() == 0)
      return true;
   if (first.length() > 1 &&first.charAt(0) == '*') {
    int i=0;
      while (i+1<first.length() && first.charAt(i+1) == '*')
       i++;
    first=first.substring(i);
   }
   if (first.length() > 1 && first.charAt(0) == '*' &&
                    second.length() == 0)
      return false;
   if ((first.length() > 1 && first.charAt(0) == '?') ||
      (first.length() != 0 && second.length() != 0 &&
       first.charAt(0) == second.charAt(0)))
      return match(first.substring(1),
                second.substring(1));
   if (first.length() > 0 && first.charAt(0) == '*')
      return match(first.substring(1), second) ||
           match(first, second.substring(1));
   return false;
}
```

```
static void test(String first, String second)
{
   if (match(first, second))
      System.out.println("Yes");
   else
      System.out.println("No");
}
        public static void main(String[] args) {
                Scanner input = new Scanner(System.in);
                String first = input.next();
                String second = input.next();
                test(first,second);

        }
}
```



Python

```
def solve(str1,str2):
    a,b=len(str1),len(str2)
    if a==0 and b==0:
        return True
    if (a > 1 and str1[0] == '*') and b == 0:
        return False
    if (a > 1 and str1[0] == '?') or (a != 0 and b !=0 and str1[0] == str2[0]):
        return solve(str1[1:],str2[1:]);
    if a !=0 and str1[0] == '*':
        return solve(str1[1:],str2) or solve(str1,str2[1:])
    return False
str1=input('Enter string with wild characters: ')
str2=input('Enter string without wild characters: ')
if (solve(str1,str2)):
    print("Yes it matches")
else:
    print("No it is not matching")
```