Started on	Thursday, 9 October 2025, 8:08 AM
State	Finished
Completed on	Thursday, 9 October 2025, 8:18 AM
Time taken	10 mins 22 secs
Marks	1.00/1.00
Grade	**10.00** out of 10.00 (**100**%)

Question 1 | Correct Mark 1.00 out of 1.00

Given two strings find the length of the common longest subsequence(need not be contiguous) between the two.

Example:

s1: ggtabe

s2: tgatasb

s1		a	g	**g**	**t**	**a**	**b**
s2	**g**	x	**t**	**x**	**a**	**y**	**b**

The length is 4

Solveing it using Dynamic Programming

For example:

Input	Result
aab azb	2

Answer: (penalty regime: 0 %)

```
#include<stdio.h>
#include<string.h>
int main(){
    char s1[100],s2[100];
    int dp[100][100];
    int m,n;
    scanf("%s",s1);
    scanf("%s",s2);
    m=strlen(s1);
    n=strlen(s2);
    for(int i=0;i<=m;i++){
        for(int j=0;j<=n;j++){
            if(i==0||j==0)
                dp[i][j]=0;
            else if (s1[i-1]==s2[j-1])
                dp[i][j]=1+dp[i-1][j-1];
            else
                dp[i][j]=(dp[i-1][j]>dp[i][j-1])?dp[i-1][j]:dp[i][j-1];
        }
    }
    printf("%d",dp[m][n]);
}
```

	Input	Expected	Got	
✔	aab azb	2	2	✔

	Input	Expected	Got	
✔	ABCD ABCD	4	4	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.