

Started on Friday, 10 October 2025, 10:10 PM

State Finished

Completed on Friday, 10 October 2025, 10:16 PM

Time taken 6 mins 4 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

The length is 4

Solving it using Dynamic Programming

For example:

Input	Result
aab	2
azb	

Answer: (penalty regime: 0 %)

```

1 #include<stdio.h>
2 #include<string.h>
3 int main(){
4     char s1[100],s2[100];
5     int dp[100][100];
6     int m,n;
7     scanf("%s",s1);
8     scanf("%s",s2);
9     m=strlen(s1);
10    n=strlen(s2);
11    for (int i=0;i<=m;i++){
12        for (int j=0;j<=n;j++){
13            if(i==0||j==0)
14                dp[i][j]=0;
15            else if(s1[i-1]==s2[j-1])
16                dp[i][j]=dp[i-1][j-1]+1;
17            else
18                dp[i][j]=(dp[i-1][j]>dp[i][j-1])?dp[i-1][j]:dp[i][j-1];
19        }
20    }
21    printf("%d",dp[m][n]);
22 }
```

	Input	Expected	Got	
✓	aab	2	2	✓
	azb			

	Input	Expected	Got	
✓	ABCD	4	4	✓
	ABCD			

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.