

Started on	Thursday, 9 October 2025, 8:10 AM
State	Finished
Completed on	Thursday, 9 October 2025, 8:23 AM
Time taken	13 mins 28 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	2
azb	

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 #include<string.h>
3 int main()
```

```

3  int main()
4  {
5      char s1[100], s2[100];
6      int dp[100][100];
7      int m,n;
8      scanf("%s",s1);
9      scanf("%s",s2);
10     m=strlen(s1);
11     n=strlen(s2);
12     for(int i=0;i<=m;i++)
13     {
14         for(int j=0;j<=n;j++)
15         {
16             if(i==0||j==0)
17                 dp[i][j]=0;
18             else if(s1[i-1]==s2[j-1])
19                 dp[i][j]=1+dp[i-1][j-1];
20             else
21                 dp[i][j]=(dp[i-1][j]>dp[i][j-1])?dp[i-1][j]:dp[i][j-1];
22         }
23     }
24     printf("%d",dp[m][n]);
25 }

```

	Input	Expected	Got	
✓	aab azb	2	2	✓
✓	ABCD ABCD	4	4	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.