

Started on Thursday, 9 October 2025, 8:15 AM

State Finished

Completed on Thursday, 9 October 2025, 8:47 AM

Time taken 31 mins 39 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()
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         for(int j=0;j<=n;j++){
14             if(i==0||j==0)
15                 dp[i][j]=0;
16             else if(s1[i-1]==s2[j-1])
17                 dp[i][j]=1+dp[i-1][j-1];
18             else
19                 dp[i][j]=(dp[i-1][j]>dp[i][j-1])?dp[i-1][j]:dp[i][j-1];
20         }
21     }
22     printf("%d",dp[m][n]);
23 }
```

	Input	Expected	Got	
✓	aab	2	2	✓
	azb			

	Input	Expected	Got	
✓	ABCD ABCD	4	4	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.