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>
#define M 100
int max(int a,int b){
    return(a>b)?a:b;
}
int main(){
    char s1[M],s2[M];
    int dp[M+1][M+1];
    scanf("%s",s1);
    scanf("%s",s2);
    int n=strlen(s1);
    int m=strlen(s2);
    for(int i=0;i<=n;i++){
        for(int j=0;j<=m;j++){
            if(i==0||j==0)
            dp[i][j]=0;
            else if (s1[i-1]==s2[j-1])
               dp[i][j]=dp[i-1][j-1]+1;
            else
               dp[i][j]=max(dp[i-1][j],dp[i][j-1]);
        }
    }
    printf("%d\n",dp[n][m]);
    return 0;
}
```

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

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

◄ 2-DP-Playing with chessboard

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4-DP-Longest non-decreasing Subsequence ►