

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
4 int max(int a, int b) {
5     return (a > b) ? a : b;
6 }
7
8 int main() {
9     char s1[1001], s2[1001];
10    scanf("%s %s", s1, s2);
11    int n = strlen(s1);
12    int m = strlen(s2);
13    int dp[n+1][m+1];
14    for(int i = 0; i <= n; i++) {
15        for(int j = 0; j <= m; j++) {
16            if(i == 0 || j == 0)
17                dp[i][j] = 0;
18            else if(s1[i-1] == s2[j-1])
19                dp[i][j] = dp[i-1][j-1] + 1;
20            else
21                dp[i][j] = max(dp[i-1][j], dp[i][j-1]);
22        }
23    }
24    printf("%d\n", dp[n][m]);
25    return 0;
26 }
27
```

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

Passed all tests! ✓