

## W. Mahmoud and Longest Uncommon Subsequence

time limit per test: 2 seconds ⓘ

memory limit per test: 256 megabytes

input: standard input

output: standard output

While Mahmoud and Ehab were practicing for IOI, they found a problem which name was Longest common subsequence. They solved it, and then Ehab challenged Mahmoud with another problem.

Given two strings  $a$  and  $b$ , find the length of their longest uncommon subsequence, which is the longest string that is a subsequence of one of them and not a subsequence of the other.

A subsequence of some string is a sequence of characters that appears in the same order in the string, The appearances don't have to be consecutive, for example, strings "ac", "bc", "abc" and "a" are subsequences of string "abc" while strings "abbc" and "acb" are not. The empty string is a subsequence of any string. Any string is a subsequence of itself.

### Input

The first line contains string  $a$ , and the second line — string  $b$ . Both of these strings are non-empty and consist of lowercase letters of English alphabet. The length of each string is not bigger than  $10^5$  characters.

### Output

If there's no uncommon subsequence, print  $-1$ . Otherwise print the length of the longest uncommon subsequence of  $a$  and  $b$ .

### Examples

input	Copy
abcd defgh	
output	Copy
5	

input	Copy
a a	
output	Copy
-1	

### Note

In the first example: you can choose "defgh" from string  $b$  as it is the longest subsequence of string  $b$  that doesn't appear as a subsequence of string  $a$ .

Assiut University Training - Newcomers

Public

Participant



About Group



ICPC Assiut  
community

Group website

Group Contests

- Sheet #10 (General Hard)
- Sheet #9 (General medium)
- Sheet #8 (General easy)
- Sheet #7 (Recursion)
- Sheet #6 (Math - Geometry)
- Sheet #5 (Functions)
- Sheet #4 (Strings)
- Contest #3.1
- Sheet #3 (Arrays)
- Contest #2
- Sheet #2 (Loops)
- Contest #1
- Sheet #1 (Data type - Conditions)

Sheet #8 (General easy).

Finished

Practice



About Time Scaling

This contest uses time limits scaling policy (depending on a programming language). The system automatically adjusts time limits by the following multipliers for some languages. Despite scaling (adjustment), the time limit cannot be more than 30 seconds. Read the details by the [link](#).

Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you -