

Common Child

Problem

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A string is said to be a child of a another string if it can be formed by deleting 0 or more characters from the other string. Given two strings of equal length, what's the longest string that can be constructed such that it is a child of both?

For example, ABCD and ABDC have two children with maximum length 3, ABC and ABD. They can be formed by eliminating either the D or C from both strings. Note that we will not consider ABCD as a common child because we can't rearrange characters and $ABCD \neq ABDC$.

Function Description

Complete the commonChild function in the editor below. It should return the longest string which is a common child of the input strings. commonChild has the following parameter(s):

- s1, s2: two equal length strings

Input Format

There is one line with two space-separated strings, **s1** and **s2**.

Constraints

- $1 \leq |s1|, |s2| \leq 5000$
- All characters are upper case in the range ascii[A-Z].

Output Format

Print the length of the longest string **s**, such that **s** is a child of both **s1** and **s2**.

Sample Input

HARRY
SALLY

Sample Output

2

Explanation

The longest string that can be formed by deleting zero or more characters from **HARRY** and **SALLY** is **AY**, whose length is 2.

Sample Input 1

AA
BB

Sample Output 1

0

Explanation 1

AA and **BB** have no characters in common and hence the output is 0.

Sample Input 2

SHINCHAN
NOHARAAA

Sample Output 2

3

Explanation 2

The longest string that can be formed between **SHINCHAN** and **NOHARAAA** while maintaining the order is **NHA**.

Sample Input 3

ABCDEF
FBDAMN

Sample Output 3

2

Explanation 3

BD is the longest child of the given strings.

Author

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Difficulty

Medium

Max Score

60

Submitted By

68534

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