# **Common Child**



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**

- $1 \le |s1|, |s2| \le 5000$
- 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  $\it SHINCHAN$  and  $\it NOHARAAA$  while maintaining the order is  $\it NHA$ .

# Sample Input 3

ABCDEF FBDAMN

# **Sample Output 3**

2

# **Explanation 3**

 $\ensuremath{\textit{BD}}$  is the longest child of the given strings.