Find the Difference

Try to solve the Find the Difference problem.

Statement

Given two strings, `str1` and `str2`, find the index of the extra character that is present in only one of the strings.

Constraints:

- $0 \leq$ `str1.length`, `str2.length` ≤ 1000
- Either `str2.length` $=$ `str1.length + 1`, or, `str1.length` $=$ `str2.length + 1`
- The strings consist of lowercase English letters.

Examples

Sample example 1

Input

string 1	m	p	o	n

string 2	m	n	o

- -

Output

1

The extra character "p" is only present in string 1, whose index is 1.

Sample example 2

Input

string 1	w	x	y	z

string 2	w	x	y	t	z

- -

Output

3

The extra character "t" is only present in string 2, whose index is 3.

Sample example 3

Input

string 1	h	e	l	l	o

string 2	n	h	e	l	l	o

Output

0

The extra character "n" is only present in string 2, whose index is 0.

Sample example 4

Input

string 1	a	a	a	a	a

string 2	a	a	a	a	a	a

Output

0

The extra character "a" is only present in string 2, whose index is 0.

Understand the problem

Let's take a moment to make sure you've correctly understood the problem. The quiz below helps you check if you're solving the correct problem:

Find the Difference

1 Find the index of the extra character that is present in only one of the strings.

string 1 = "pqr"

string 2 = "psrq"

A) 0

B) 1

C) 2

D) 3

Figure it out!

We have a game for you to play. Rearrange the logical building blocks to develop a clearer understanding of how to solve this problem.

📑 Drag and drop the cards to rearrange them in the correct sequence.

Intialize a variable, `result`, with 0.

Perform a bitwise XOR operation between the current value of `result` and the ASCII value of each character in `str1`. Update the value of `result` with the computed XOR value every time.

Perform a bitwise XOR operation between the current value of `result` and the characters of `str2`. Update the value of `result` each time with the computed XOR value.

`result` now contains the ASCII value of the extra character. Find and return the index of the extra character from the longer string.

Reset   Show Solution   Submit

Try it yourself

☕ Java   💾 ↻

usercode > main.java

```java
1  import java.util.*;
2  public class Main{
3      public static int extraCharcterIndex(String str1, String str2) {
4
5          // Write your code here
6
7          return -1;
8      }
9  }
```

✨ Powered by AI   ▷   **Submit**

Test Cases   Results

| Case 1 | Case 2 | Case 3 |

Input #1

"wxyz"

Input #2

"zwxgy"

Find the Difference

← **Back**

Bitwise Manipulation: ...

Next →

Solution: Find the Diff...

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