## Minimum string moves

We have two strings $A$ and $B$ which are permutations of the same set of characters. We need to change these strings to obtain two identical strings by performing the following operations:

1) swap two consecutive characters of a string
2) swap the first and the last characters of a string

The operation can be performed on either string. Return the minimum number of moves that we need in order to obtain two equal strings?

## Constraints

$1<$ length $(A)=$ length $(B) \leq 2,000$
All the input characters are between 'a' and 'z'
The count of each distinct character in $A$ is identical to the count of the same character in $B$.

## Input

First line: String A.
Second line: String B.

## Output

Minimum number of moves.

## Example

## Input:

aab
baa

## Output:

1

