

Problem D - No substitution

In the last lecture Ben learned about the edit distance. Now, his professor want to test him and modifies the problem. Ben asks you for help and shows you the following task:

Input: Two strings S_1 and S_2

Question: How many insert and delete operations are at least needed to convert S_1 to S_2 ?

Input

The input consists out of:

- Two lines each containing a string of n characters, where $1 \leq n \leq 5000$.

Output

Number of insert and delete operations to convert one string to the other.

Sample Input 1	Sample Output 1
sunday saturday	4
Sample Input 2	Sample Output 2
hello world	8