Minimum Cost

Problem Statement

Given two string **S** and **T**. You can delete a character from **S** with cost 15 and a Character **T** with cost 30. Your goal is to make the string equal (same). It is not mandatory to delete character.

For example: S = aXb and T = Yab. Now, if we delete X from S and Y from T, then total cost = 15 + 30 = 45. And S and T will become **ab**.

Another example: S = ab, T = cd, Now total cost = 15 + 15 + 30 + 30 = 90.

Another example: S = abcd, T = acdb, Now total cost = 15 + 30 = 45.

Input

Input consists of pairs of lines. The first line of a pair contains the first string **S** and the second line contains the second string **T**. Each string is on a separate line and consists of at most 1,000 characters. The end of input occurs when the first sequence starts with an "#" character (without the quotes).

Output

For each subsequent pair of input lines, output a line containing one integer number which the minimum cost to make the string equal (same).

Sample Input/Output

Sample Input	Sample Output
axb	45
yab	90
ab	60
cd	45
ko	
p	
abcd	
acdb	
#	

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