

Problem A. Merges and Acquisitions

Input file: *standard input*
Output file: *standard output*
Time limit: 1 second
Memory limit: 512 megabytes

The CEO of the company named S is planning to merge with another company named T . The CEO wants to keep the original company name S through the merge process on the plea that both company names are mixed into a new one.

The CEO insists that the mixed company name is produced as follows.

Let s be an arbitrary subsequence of S , and t be an arbitrary subsequence of T . The new company name must be a string of the same length to S obtained by alternatively lining up the characters in s and t . More formally, $s_0 + t_0 + s_1 + t_1 + \dots$ or $t_0 + s_0 + t_1 + s_1 + \dots$ can be used as the company name after merging. Here, s_k denotes the k -th (0-based) character of string s . Please note that the lengths of s and t will be different if the length of S is odd. In this case, the company name after merging is obtained by $s_0 + t_0 + \dots + t_{|S|/2} + s_{|S|/2+1}$ or $t_0 + s_0 + \dots + s_{|S|/2} + t_{|S|/2+1}$ ($|S|$ denotes the length of S and “/” denotes integer division).

A subsequence of a string is a string which is obtained by erasing zero or more characters from the original string. For example, the strings “abe”, “abcde” and “” (the empty string) are all subsequences of the string “abcde”.

You are a programmer employed by the acquiring company. You are assigned a task to write a program that determines whether it is possible to make S , which is the original company name, by mixing the two company names.

Input

The first line contains a string S which denotes the name of the company that you belong to. The second line contains a string T which denotes the name of the target company of the planned merging. The two names S and T are non-empty and of the same length no longer than 10^3 characters, and all the characters used in the names are lowercase English letters.

Output

Print “Yes” in a line if it is possible to make original company name by combining S and T . Otherwise, print “No” in a line.

Examples

standard input	standard output
acmicpc tsukuba	No
hoge moen	Yes
abcdefg xacxegx	Yes