Append and Delete



You have a string, s, of lowercase English alphabetic letters. You can perform two types of operations on s:

- 1. Append a lowercase English alphabetic letter to the end of the string.
- 2. *Delete* the last character in the string. Performing this operation on an empty string results in an empty string.

Given an integer, k, and two strings, s and t, determine whether or not you can convert s to t by performing exactly k of the above operations on s. If it's possible, print Yes; otherwise, print No.

Input Format

The first line contains a string, s, denoting the initial string.

The second line contains a string, t, denoting the desired final string. The third line contains an integer, k, denoting the desired number of operations.

Constraints

- $1 \le |s| \le 100$
- $1 \le |t| \le 100$
- $1 \le k \le 100$
- ullet and $oldsymbol{t}$ consist of lowercase English alphabetic letters.

Output Format

Print Yes if you can obtain string t by performing exactly k operations on s; otherwise, print No.

Sample Input 0

hackerhappy hackerrank 9

Sample Output 0

Yes

Explanation 0

We perform $\bf 5$ delete operations to reduce string $\bf s$ to hacker. Next, we perform $\bf 4$ append operations (i.e., r, a, n, and k), to get hackerrank. Because we were able to convert $\bf s$ to $\bf t$ by performing exactly $\bf k=9$ operations, we print Yes.

Sample Input 1

aba aba 7

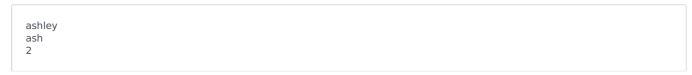
Sample Output 1

Yes

Explanation 1

We perform ${\bf 4}$ delete operations to reduce string ${\bf s}$ to the empty string (recall that, though the string will be empty after ${\bf 3}$ deletions, we can still perform a delete operation on an empty string to get the empty string). Next, we perform ${\bf 3}$ append operations (i.e., ${\bf a}$, ${\bf b}$, and ${\bf a}$). Because we were able to convert ${\bf s}$ to ${\bf t}$ by performing exactly ${\bf k}={\bf 7}$ operations, we print Yes.

Sample Input 2



Sample Output 2

No

Explanation 2

To convert ashley to ash a minimum of 3 steps are needed. Hence we print No as answer.