# **Append and Delete**



You have a string,  $\boldsymbol{s}$ , of lowercase English alphabetic letters. You can perform two types of operations on  $\boldsymbol{s}$  .

- 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.