

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

- $1 \leq |s| \leq 100$
- $1 \leq |t| \leq 100$
- $1 \leq k \leq 100$
- s and 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 **5** delete operations to reduce string **s** to hacker . Next, we perform **4** append operations (i.e., r , a , n , and k), to get hackerrank . Because we were able to convert **s** to **t** by performing exactly **k = 9** operations, we print Yes .

Sample Input 1

```
aba
aba
7
```

Sample Output 1

```
Yes
```

Explanation 1

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