Are they all palindromes? P21691_en

You are given a string s and a length ℓ. Are all the substrings of length ℓ of s palindromes?

For instance, let s = "`ababa`" and $\ell = 3$. Here, we have $s[0..2]$ = "`aba`", $s[1..3]$ = "`bab`" and $s[2..4]$ = "`aba`". Since the three substrings of s of length 3 are palindomes, in this case the answer is positive.

Input

Input consists of several cases, each with s and ℓ. Let n be the size of s. You can assume $1 \leq \ell \leq n \leq 10^5$, and that s is made up of only lowercase letters.

Output

For every case, print "`yes`" or "`no`".

Sample input 1

```
ababa 3
abracadabra 5
zz 2
```

Sample output 1

```
yes
no
yes
```

Problem information

Author: Salvador Roura

Generation: 2026-01-25T10:12:39.538Z