Problem E
A Color Game

Time limit: 3 seconds
Memory limit: 1024 megabytes

Problem Description

Playing games is fun. For programmers, however, playing games with programs is even more fun. Consider a simple single-user tabletop game as follows. Given a row of sticks, each of which is in one of the seven colors, red (`R`), green (`G`), blue (`B`), cyan (`C`), magenta (`M`), yellow (`Y`), and key (`K`), the goal of the game is to eliminate all the sticks by repeating the following rules.

- Consecutive sticks with the same color can be eliminated if the size of them is not less than m.
- The remaining sticks will move closer together.

For the case where the row is `BBBRRRRRRGGGB` and m is 3, all the sticks can be successfully eliminated as the following steps:

1. `BBBRRRRRRGGGB`
2. `BBBGGGB` (By eliminating all red sticks)
3. `BBBB` (By eliminating all green sticks)
4. (By eliminating all blue sticks)

For the same row of sticks with $m = 4$, however, it is no way to eliminate all the sticks.

Given a row of n sticks and the value of m, your task is to determine if it is possible to eliminate all the sticks.

Input Format

Each test case is given as a string that is the row of sticks and an integer m.

Output Format

Output `Yes` if it is possible to eliminate all the sticks. Otherwise, output `No`.

Technical Specification

- $0 < n, m \leq 500$

Sample Input 1

```
BBBRRRRRRGGGB 3
```

Sample Output 1

```
Yes
```

Sample Input 2

```
BBBRRRRRRGGGB 4
```

Sample Output 2

```
No
```