Given a sting **S** of length **N**, comprised entirely from **‘0’-**s and **‘1’-**s, and two numbers **L** and **K**, your task is to find out if every substring of **S** with length **L** contains at least **K** ‘0’-s.

**Note: A substring of S with length L is a string containing the elements from S[i] to S[i+L-1] inclusive (for some nonnegative integer i ≤ N – L).**

**Input**

The first line of the file substring.in contains the integer **N**.

The next line contains the string **S**.

The final row contains the integers **L** and **K**, separated by a single space.

**Output**

In the output file substring.out print **“Yes”** if every continuous substring of **S** with length **L** contains at least **K** ‘0’-s and **“No”** otherwise.

**Constraints**

1 ≤ *N* ≤ 106

1 ≤ K ≤ *L* ≤ N

**Time limit: 0.5 sec**

**Memory limit: 256 MB**

**Example test**

|  |  |
| --- | --- |
| **Input (substring.in)** | **Output (substring.out)** |
| 010000111011117 3 | No |
| 000000101000104 2 | Yes |

 **Clarifications**

**Example 1:** In the substring S[6 – 12] (“1110111”), for example, there is only a single ‘0’.

**Example 2:** Every substring of length L contains at least two ‘0’-s.