InfO(1) CUP 2019
Third edition
National Round
TREASURE

## TREASURE

Maximum time of execution: 0.2 seconds/test. Maximum available memory: $\mathbf{2 5 6}$ MB

Andrei is an adventurer who tries to find a treasure full of gold coins. When he arrives at the last clue, which will tell him where the treasure is, he sees that on the clue there are two numbers, N and K , and a string of N lowercase English letters. Andrei should take the current string and should eliminate the first sequence of exactly K identical letters which appear on consecutive positions. He will repeat this process until there will be no sequence which has K consecutive identical letters.

Andrei asks you to solve this problem as soon as possible so that he will be the first who discovers the treasure.

## TASK

Find the final string after you successively eliminate the first sequence of K identical letters which appear on consecutive positions, until there is no such sequence left.

## INPUT FORMAT

The first line of the input contains two integers, N , representing the number of characters of the string, and K, representing the lenght of a sequence of identical characters.

The second line of the input contains the string of N lowercase English letters.

## OUTPUT FORMAT

The first line of the output contains a string of lowercase English letters, the string which will be obtained after all the possible eliminations are made.

## RESTRICTIONS

- $2 \leq K \leq N \leq 200.000$
- The initial string contains only lowercase English letters
- It is guaranteed that the final string is not empty!

| Subtask | Score | Restrictions |
| :---: | :---: | :---: |
| 1 | 35 points | $\boldsymbol{N}, \boldsymbol{K}<=1000$ |
| 2 | Another 65 points | $\boldsymbol{N}, \boldsymbol{K}<=200.000$ |

## EXAMPLES:

| Input (from the console) | Output (to the console) |
| :--- | :--- |
| 52 | c |
| abbac |  |

Explanation:
The initial string : abbac
The string after the first elimination : aac
The string after the second elimination: c

| Input (from the console) | Output (to the console) |
| :--- | :--- |
| 123 <br> aabbbaabbaac | abbaac |

Explanation:
The initial string : aabbbaabbaac
The string after the first elimination : aaaabbaac
The string after the second elimination : abbaac

