

Southeastern European Regional Programming Contest
Bucharest, Romania
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Problem B
Circle of digits

Input File: B.in
Output File: standard output
Program Source File: B.c, B.cpp, B.java

You are given a circular string of length **N** that consists of digits `'1'..'9'`. You want to split it into **K** continuous non-empty parts. Each of those parts represents a decimal notation of some integer number. Your goal is to find a partition that minimizes the maximum integer from the partition at hand.

For example, if the string is `7654321` and **K**=`3` then the optimal partition is: `{176, 54, 32}` which has `176` as the maximum number. Note that the string is cyclic, that is the first character goes right after the last one (as in the `176` part of the above example).

Input
The first line of the input contains two integers **N** and **K** (`3` ≤ **N** ≤ `100000`, `2` ≤ **K** ≤ **N**). The second line contains a string of length **N** which consists only of characters `'1'..'9'`.

Output
Output the value of the maximal number in the optimal partition.

Sample input	Sample output
4 2 **4321**	**32**
7 3 **7654321**	**176**
5 5 **12321**	**3**

Comment
In the first sample the optimal partition is `{32, 14}`.
In the second sample the optimal partition is `{176, 54, 32}`.
In the third sample the optimal (and the only possible) partition is `{1, 2, 3, 2, 1}`.