Worst Permutation



Problem Statement

You are given an array of \$N\$ integers which is a permuation of the first \$N\$ natural numbers. You can swap any two elements of the array. You can make at most \$K\$ swaps. What is the lexicographically worst permutation you can make?

Input Format

The first line of the input contains two integers, \$N\$ and \$K\$, the size of the input array and the maximum swaps you can make, respectively. The second line of the input contains a permutation of the first \$N\$ natural numbers.

Output Format

Print the lexicographically worst permutation you can make with **at most** \$K\$ swaps.

Constraints

\$1 \le N \le 10^5\$ \$1 \le K \le 10^9\$

Sample Input#00

5 1 4 2 3 5 1

Sample Output#00

52341

Explanation#00

You can swap any two numbers in \$[4,2,3,5,1]\$ and see the worst permutation is \$[5,2,3,4,1]\$

Sample Input#01

3 1 2 1 3

Sample Output#01

312

Explanation#01

With 1 swap we can get $\{[1,2,3]$, $\{[3,1,2]$ and $\{[2,3,1]\}$ out of these $\{[3,1,2]\}$ is the worst permutation.

Sample Input#02

Sample Output#02

Explanation#02

We can see that \$[2,1]\$ is already the worst permutation. So we don't need any swaps.