

Largest Permutation



You are given an array of N integers which is a permutation 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 largest permutation, in numerical order, 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 largest permutation you can make with **at most** K swaps.

Constraints

$$1 \leq N \leq 10^5$$

$$1 \leq K \leq 10^9$$

Sample Input#00

```
5 1
4 2 3 5 1
```

Sample Output#00

```
5 2 3 4 1
```

Explanation#00

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

Sample Input#01

```
3 1
2 1 3
```

Sample Output#01

```
3 1 2
```

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 largest permutation.

Sample Input#02

```
2 1
2 1
```

Sample Output#02

```
2 1
```

Explanation#02

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