Unlock

Shekhar is a bomb defusal specialist. He once encountered a bomb that can be defused only by a secret code. He is given a number N and a number K. And he is also given permutation of first N natural numbers . The defusal code is the largest permutation possible by doing exactly K swaps among a pair of the given permutation. Help him to find the final permutation.

Input Format:

First line contains *an integer N and an integer k. The next line contains N space separated integers denoting the given permutation.*

Output Format:

The final permutation of the numbers with every number separated by a space with other number.

Constraints:

1 <= n <= 10^5

1<= K <= 10^9

Sample Input

5 2

3 4 1 2 5

Sample Output

5 4 3 2 1

Difficulty

Easy

Explanation

First we can swap 5 with 3 which gives us 5 4 1 2 3 and then we can swap 3 and 1 which gives us 5 4 3 2 1.