Arrays: Left Rotation



A *left rotation* operation on an array of size n shifts each of the array's elements 1 unit to the left. For example, if 2 left rotations are performed on array [1,2,3,4,5], then the array would become [3,4,5,1,2].

Given an array of n integers and a number, d, perform d left rotations on the array. Then print the updated array as a single line of space-separated integers.

Input Format

The first line contains two space-separated integers denoting the respective values of n (the number of integers) and d (the number of left rotations you must perform).

The second line contains n space-separated integers describing the respective elements of the array's initial state.

Constraints

- $1 \le n \le 10^5$
- $1 \leq d \leq n$
- $1 \le a_i \le 10^6$

Output Format

Print a single line of n space-separated integers denoting the final state of the array after performing d left rotations.

Sample Input

5 4 1 2 3 4 5

Sample Output

51234

Explanation

When we perform d=4 left rotations, the array undergoes the following sequence of changes:

$$[1,2,3,4,5] \rightarrow [2,3,4,5,1] \rightarrow [3,4,5,1,2] \rightarrow [4,5,1,2,3] \rightarrow [5,1,2,3,4]$$

Thus, we print the array's final state as a single line of space-separated values, which is 5 1 2 3 4.