Problem F. Left Rotation

OS Linux

A *left rotation* operation on an array of size n shifts each of the array's elements n unit to the left. Given an integer, n, rotate the array that many steps left and return the result.

Example

$$egin{aligned} d = 2 \ arr = [1,2,3,4,5] \end{aligned}$$

After **2** rotations, arr' = [3, 4, 5, 1, 2].

Function Description

Complete the rotateLeft function in the editor below.

rotateLeft has the following parameters:

- *int d*: the amount to rotate by
- int arr[n]: the array to rotate

Returns

• *int[n]*: the rotated array

Input Format

The first line contains two space-separated integers that denote $m{n}$, the number of integers, and $m{d}$, the number of left rotations to perform.

The second line contains n space-separated integers that describe arr[].

Constraints

- $1 \le n \le 10^5$
- $1 \le d \le n$
- $1 \leq a[i] \leq 10^6$

Sample Input

(STLs: Iterators, Vector, Stack, Queue, Deque). Sep 06, 2022

Sample Output

5 1 2 3 4

Explanation

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

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