

# Problem A. Left Rotation

OS Linux

A *left rotation* operation on an array of size  $n$  shifts each of the array's elements **1** unit to the left. Given an integer,  $d$ , rotate the array that many steps left and return the result.

## Example

$d = 2$

$arr = [1, 2, 3, 4, 5]$

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  $n$ , the number of integers, and  $d$ , the number of left rotations to perform.

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

## Constraints

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

Input	Output
5 4 1 2 3 4 5	5 1 2 3 4

## Explanation

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

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