



Arrays: Left Rotation

by saikiran9194

Problem

Submissions

Leaderboard

Discussions

Editorial

Check out the resources on the page's right side to learn more about arrays. The video tutorial is by Gayle Laakmann McDowell, author of the best-selling interview book [Cracking the Coding Interview](#).

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

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

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

```
5 1 2 3 4
```

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`.



Submissions: 15608

Max Score: 20



Difficulty: Easy

Rate This Challenge:



[Need Help?](#)

10:08

[Arrays](#)[ArrayLists](#)[More](#)Current Buffer (saved locally, editable)  Python 2 

```
1 def array_left_rotation(a, n, k):
2
3     for i in range(0,k):
4         first = a[0]
5         temp = a[n-1]
6         for j in range(n-1,-1,-1):
7             temp1 = a[j-1]
8             a[j-1] = temp
9             temp = temp1
10        a[n-1] = first
11    return a
12
13
14
15
16 n, k = map(int, raw_input().strip().split(' '))
17 a = map(int, raw_input().strip().split(' '))
18 answer = array_left_rotation(a, n, k);
19 print ' '.join(map(str,answer))
20
```

Line: 10 Col: 27

 [Upload Code as File](#)☐ [Test against custom input](#)[Run Code](#)[Submit Code](#)Testcase 0 **Congratulations, you passed the sample test case.**Click the **Submit Code** button to run you code against all the test cases.**Input (stdin)**

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

Your Output (stdout)

```
5 1 2 3 4
```

Expected Output

```
5 1 2 3 4
```

Copyright © 2016 HackerRank. All Rights Reserved

Join us on IRC at [#hackerrank](#) on freenode for hugs or bugs.[Contest Calendar](#) | [Interview Prep](#) | [Blog](#) | [Scoring](#) | [Environment](#) | [FAQ](#) | [About Us](#) | [Support](#) | [Careers](#) | [Terms Of Service](#) | [Privacy Policy](#) | [Request a Feature](#)