# Arrays: Left Rotation ☆

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**Problem** Submissions Leaderboard 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 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 $a$ of $n$ integers and a number, $d$, perform $d$ left rotations on the array. Return the updated array to be printed as a single line of space-separated integers.

**Function Description**

Complete the function rotLeft in the editor below. It should return the resulting array of integers.

rotLeft has the following parameter(s):

- An array of integers $a$.
- An integer $d$, the number of rotations.

**Input Format**

The first line contains two space-separated integers $n$ and $d$, the size of $a$ and the number of left rotations you must perform.
The second line contains $n$ space-separated integers $a[i]$.

**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:

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

Python 3

```
#!/bin/python3

import math
import os
import random
import re
import sys

# Complete the rotLeft function below.
def rotLeft(a, d):
    d=d%len(a)
    finished_list= a[d:]+a[0:d]

    return finished_list


if __name__ == '__main__':
    fptr = open(os.environ['OUTPUT_PATH'], 'w')

    nd = input().split()

    n = int(nd[0])

    d = int(nd[1])

    a = list(map(int, input().rstrip().split()))

    result = rotLeft(a, d)

    fptr.write(' '.join(map(str, result)))
    fptr.write('\n')

    fptr.close()

```

Line: 14 Col: 25

Upload Code as File  Test against custom input  Run Code  Submit Code

# Congratulations!

You have passed the sample test cases. Click the submit button to run your code against all the test cases.

Sample Test case 0

Sample Test case 1

Sample Test case 2

Input (stdin) Download

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

Your Output (stdout)

```
5 1 2 3 4
```

Expected Output Download

```
5 1 2 3 4
```