Arrays: Left Rotation ☆

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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:

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

Change Theme C++

```
2
3   using namespace std;
4
5   vector<string> split_string(string);
6
7   // Complete the rotLeft function below.
8   vector<int> rotLeft(vector<int> a, int d) {
9       std::rotate(a.begin(), a.begin()+d, a.end());
10      //Old vector : 1 2 3 4 5 6 7 8 9
11      //New vector after left rotation : 4 5 6 7 8 9 1 2 3
12      // if you want to rotate right std::rotate(a.begin(), a.begin()-d, a.end());
13      //Old vector : 1 2 3 4 5 6 7 8 9
14      //New vector after right rotation: 6 7 8 9 1 2 3 4 5
15      return a;
16  }
17
18  int main()
19  {
20      ofstream fout(getenv("OUTPUT_PATH"));
21
22      string nd_temp;
23      getline(cin, nd_temp);
```

Line: 14 Col: 7

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

Congratulations

You solved this challenge. Would you like to challenge your friends?

Next Challenge

Test case 0
Test case 1
Test case 2
Test case 3
Test case 4
Test case 5
Test case 6

Compiler Message

Success

Input (stdin) Download

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

Expected Output Download

```
5 1 2 3 4
```