

Left Rotation

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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

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

Sample Input

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

Sample Output

```
5 1 2 3 4
```

Explanation

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

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

Author	[deleted]
Difficulty	Easy
Max Score	100
Submitted By	9854

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Language

C++11

```
1  #include <bits/stdc++.h>
2
3  using namespace std;
4
5  string ltrim(const string &);
6  string rtrim(const string &);
7  vector<string> split(const string &);
8
9  /*
```

```
10  * Complete the 'rotateLeft' function below.
11  *
12  * The function is expected to return an INTEGER_ARRAY.
13  * The function accepts following parameters:
14  * 1. INTEGER d
15  * 2. INTEGER_ARRAY arr
16  */
17
18  vector<int> rotateLeft(int d, vector<int> arr) {
19
20  }
21
22  int main()
23  {
24      ofstream fout(getenv("OUTPUT_PATH"));
25
26      string first_multiple_input_temp;
27      getline(cin, first_multiple_input_temp);
28
29      vector<string> first_multiple_input = split(rtrim(first_multiple_input_temp));
30
```

Line: 103 Col: 1

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