

Codility

CodeCheck Report: trainingNXA4XT-7M3


Test Name:

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Summary

Timeline

Tasks summary

| Task | Time spent | Score |
|--|------------|-------|
| CyclicRotation Python  | 4 min | 100% |

Total score



Tasks Details

| | | | | | | | |
|------|--|------------|--|-------------|--|--------------|--|
| Easy | 1. CyclicRotation | Task Score | | Correctness | | Performance | |
| | Rotate an array to the right by a given number of steps. | 100% | | 100% | | Not assessed | |

Task description

Solution

Programming language used: Python

Total time used: 4 minutes Effective time used: 4 minutes Notes: *not defined yet*

Task timeline



An array A consisting of N integers is given. Rotation of the array means that each element is shifted right by one index, and the last element of the array is moved to the first place. For example, the rotation of array A = [3, 8, 9, 7, 6] is [6, 3, 8, 9, 7] (elements are shifted right by one index and 6 is moved to the first place).

The goal is to rotate array A K times; that is, each element of A will be shifted to the right K times.

Write a function:

```
def solution(A, K)
```

that, given an array A consisting of N integers and an integer K, returns the array A rotated K times.

For example, given

```
A = [3, 8, 9, 7, 6]
K = 3
```

the function should return [9, 7, 6, 3, 8]. Three rotations were made:

```
[3, 8, 9, 7, 6] -> [6, 3, 8, 9, 7]
[6, 3, 8, 9, 7] -> [7, 6, 3, 8, 9]
[7, 6, 3, 8, 9] -> [9, 7, 6, 3, 8]
```

For another example, given

```
A = [0, 0, 0]
K = 1
```

the function should return [0, 0, 0]

Given

```
A = [1, 2, 3, 4]
K = 4
```

the function should return [1, 2, 3, 4]

Assume that:

- N and K are integers within the range [0..100];
- each element of array A is an integer within the range [-1,000..1,000].

In your solution, focus on **correctness**. The performance of your solution will not be the focus of the assessment.

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07:42:07

07:45:54

Code: 07:45:53 UTC, py, [show code in pop-up](#)
final, score: 100

```
1 # you can write to stdout for debugging |
2 # print("this is a debug message")
3
4 def solution(A, K):
5     # Implement your solution here
6     # pass
7     length_array = len(A)
8
9     if length_array == 0:
10        return A
11
12    K = K % length_array
13    A[:] = A[length_array - K:] + A[:len
14
15    return A
```

Analysis summary

The solution obtained perfect score.

Analysis

| expand all | Example tests |
|--|-------------------|
| ▶ example | ✓ OK |
| first example test | |
| ▶ example2 | ✓ OK |
| second example test | |
| ▶ example3 | ✓ OK |
| third example test | |
| expand all | Correctness tests |
| ▶ extreme_empty | ✓ OK |
| empty array | |
| ▶ single | ✓ OK |
| one element, 0 <= K <= 5 | |
| ▶ double | ✓ OK |
| two elements, K <= N | |
| ▶ small1 | ✓ OK |
| small functional tests, K < N | |
| ▶ small2 | ✓ OK |
| small functional tests, K >= N | |
| ▶ small_random_all_rotations | ✓ OK |
| small random sequence, all rotations, N = 15 | |
| ▶ medium_random | ✓ OK |
| medium random sequence, N = 100 | |
| ▶ maximal | ✓ OK |
| maximal N and K | |