Codility_

Candidate Report: training8F788W-E3W

Test Name:

Summary   Timeline

Tasks summary

Task		Time spent	Score
CyclicRotation Python	⚠️	15 min	87%

Total score

87%

Tasks Details

1. CyclicRotation

Easy

Rotate an array to the right by a given number of steps.

Task Score	**Correctness**	**Performance**	
87%	87%	Not assessed	

Task description

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:

Solution

Programming language used:	Python
Total time used:	15 minutes ❓
Effective time used:	15 minutes ❓
Notes:	*not defined yet*

Task timeline ❓

09:25:43   09:40:15

Code: 09:40:15 UTC, py, final, score: **87**	show code in pop-up

```
[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.

```python
1   # you can write to stdout for debugging purposes, e.g.
2   # print("this is a debug message")
3
4   def solution(A, K):
5       # write your code in Python 3.6
6       L = len(A)
7       K = K%L
8       if K == 0:
9           return A
10      i = 0
11      dic = {}
12      while i<L:
13          idx = (i+K) % L
14          dic[idx] = A[i]
15          i = i + 1
16      #print(dic)
17      tmp = []
18      i = 0
19      while i<L:
20          tmp.append(dic[i])
21          i = i + 1
22      return tmp
23
24
25  """A = [1, 2, 3, 4]
26  K = 4
27  tmp = solution(A, K)
28  print(tmp)"""
```

Analysis summary

The following issues have been detected: runtime errors.

For example, for the input ([], 0) the solution terminated unexpectedly.

Analysis

expand all	Example tests	
▶ example first example test		✓ OK
▶ example2 second example test		✓ OK
▶ example3 third example test		✓ OK

expand all	Correctness tests	
▶ extreme_empty empty array		✗ RUNTIME ERROR tested program terminated with exit code 1
▶ single one element, 0 <= K <= 5		✓ OK
▶ double two elements, K <= N		✓ OK
▶ small1 small functional tests, K < N		✓ OK
▶ small2 small functional tests, K >= N		✓ OK
▶		

small_random_all_rotations small random sequence, all rotations, N = 15	✓ OK
▶ medium_random medium random sequence, N = 100	✓ OK
▶ maximal maximal N and K	✓ OK

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