

CodeCheck Report: trainingHC2KTQ-73C

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Test Name:

Summary    Timeline

Tasks summary

Task	Time spent	Score
CyclicRotation Java 8	1 min	100%

Total score



Tasks Details

Easy

1. CyclicRotation

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

Task Score

Correctness  
100%

Performance  
100%    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:

```
class Solution { public int[] solution(int[] A, int 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]

Solution

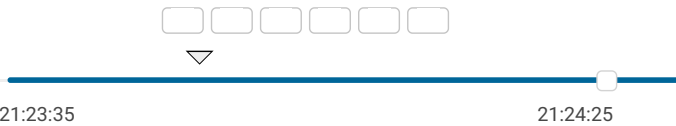
Programming language used:    Java 8

Total time used:    1 minutes    ?

Effective time used:    1 minutes    ?

Notes:    not defined yet

Task timeline    ?



Code: 21:24:25 UTC, java, final,    [show code in pop-up](#)  
score: 100

```
1 class Solution {
2     public int[] solution(int[] A, int K) {
3         int N = A.length;
4
5         int[] B = new int[N];
6         for (int i = 0; i < N; i++) {
7             B[(i + K) % N] = A[i];
8         }
9         return B;
10    }
11 }
```

Analysis summary

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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Test results - Codility

The solution obtained perfect score.

Analysis

collapse all		Example tests	
▼	example	✓ OK	
first example test			
-----			
1.	0.004 s	OK	
▼	example2	✓ OK	
second example test			
-----			
1.	0.008 s	OK	
▼	example3	✓ OK	
third example test			
-----			
1.	0.004 s	OK	
collapse all		Correctness tests	
▼	extreme_empty	✓ OK	
empty array			
-----			
1.	0.008 s	OK	
2.	0.004 s	OK	
▼	single	✓ OK	
one element, 0 <= K <= 5			
-----			
1.	0.004 s	OK	
2.	0.008 s	OK	
3.	0.004 s	OK	
▼	double	✓ OK	
two elements, K <= N			
-----			
1.	0.008 s	OK	
2.	0.004 s	OK	
▼	small1	✓ OK	
small functional tests, K < N			
-----			
1.	0.008 s	OK	
2.	0.008 s	OK	
▼	small2	✓ OK	
small functional tests, K >= N			
-----			
1.	0.008 s	OK	
2.	0.008 s	OK	
3.	0.008 s	OK	
▼	small_random_all_rotations	✓ OK	
small random sequence, all rotations, N = 15			
-----			
1.	0.004 s	OK	
2.	0.004 s	OK	
3.	0.004 s	OK	
4.	0.004 s	OK	
5.	0.008 s	OK	
6.	0.004 s	OK	
7.	0.004 s	OK	
8.	0.004 s	OK	
9.	0.004 s	OK	
10.	0.004 s	OK	
11.	0.004 s	OK	
12.	0.004 s	OK	

Test results - Codility

13.	0.008 s	OK
14.	0.008 s	OK
15.	0.004 s	OK
<div>▼ medium_random</div> <div>medium random sequence, N = 100</div>		
1.	0.008 s	OK
2.	0.008 s	OK
<div>▼ maximal</div> <div>maximal N and K</div>		
1.	0.004 s	OK
2.	0.004 s	OK
3.	0.008 s	OK
4.	0.004 s	OK