

# Candidate Report: Anonymous

Test Name:


SUMMARY    TIMELINE

## Test Score

87 out of 100 points

87%

## Tasks in Test

	Time Spent ⓘ	Task Score
 CyclicRotation Submitted in: C#	25 min	<div><div>87%</div></div>

## TASKS DETAILS

EASY

1.

CyclicRotation

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

Task Score

87%

Correctness

87%

Performance

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); }
```

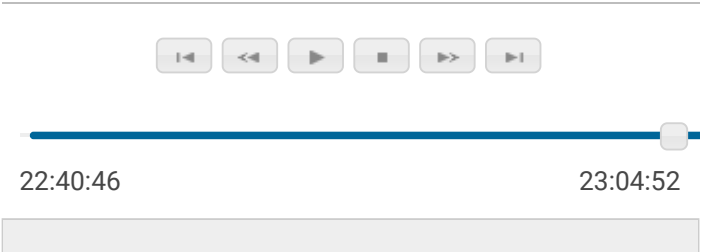
that, given an array A consisting of N integers and an integer K, returns the array A rotated K times.

For example, given

## Solution

Programming language used:	C#
Total time used:	25 minutes ⓘ
Effective time used:	25 minutes ⓘ
Notes:	not defined yet

## Task timeline ⓘ



2/1/2019

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.

Copyright 2009–2019 by Codility Limited. All Rights Reserved.  
Unauthorized copying, publication or disclosure prohibited.

Test results - Codility

Code: 23:04:51 UTC, cs,  
final, score: 87

show code in pop-up

1 using System;  
2 // you can also use other imports, for example:  
3 // using System.Collections.Generic;  
4  
5 // you can write to stdout for debugging purpose  
6 // Console.WriteLine("this is a debug message");  
7  
8 class Solution {  
9 public int[] solution(int[] A, int K)  
10 {  
11 for (int i = 1; i <= K; i++)  
12 {  
13 var first = A[0];  
14 var last = A[A.Length - 1];  
15  
16 var prev = first;  
17 for (int j = 1; j < A.Length; j++)  
18 {  
19 var curr = A[j];  
20 A[j] = prev;  
21 prev = curr;  
22 }  
23  
24 A[0] = last;  
25 }  
26  
27 return A;  
28 }  
29 }

Analysis summary

The following issues have been detected: runtime errors.

For example, for the input ([ ], 1) the solution terminated unexpectedly.

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	✗ RUNTIME ERROR
	empty array	
		tested program
		terminated with exit
		code 1
▶	single	✓ OK
	one element, 0 <= K <= 5	
▶		

https://app.codility.com/demo/results/trainingJ3FZFC-H64/

2/3

double	✓ OK
two elements, $K \leq N$	
▶ small1	✓ OK
small functional tests, $K < N$	
▶ small2	✓ OK
small functional tests, $K \geq N$	
▶ 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 $K$	