



CodeCheck Report: trainingVJ2JM6-YRG

Test Name:

[Check out C...](#)

Summary    Timeline

Tasks summary

Task	Time spent	Score
CyclicRotation		
Go	43 min	50%

Total score

50%

Tasks Details

Easy	1. CyclicRotation			
	Rotate an array to the right by a given number of steps.	Task Score 50%	Correctness 50%	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:

```
func Solution(A []int, K int) []int
```

Solution

Programming language used:	Go
Total time used:	43 minutes
Effective time used:	43 minutes
Notes:	not defined yet

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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final, score: 50

```
1 package solution
2
3 import "math"
4
5 func rotateRight(A []int, K int) []int {
6     lastKElementsToPutInFront := A[len(A)-K:]
7     return append(lastKElementsToPutInFront, A[:len(A)-K]...)
8 }
9
10 func rotateLeft(A []int, K int) []int {
11     firstKElementsToPutInBack := A[:K]
12     return append(A[K:], firstKElementsToPutInBack...)
13 }
14
15 func Solution(A []int, K int) []int {
16     if len(A) == K {
17         return A
18     }
19
20     KLeft := len(A) - K
21
22     minimumK := math.Min(float64(K), float64(KLeft))
23
24     if minimumK == float64(K) {
25         return rotateRight(A, K)
26     }
27
28     return rotateLeft(A, KLeft)
29 }
```

### Analysis summary

The following issues have been detected: runtime

For example, for the input ([1, 2, 3, 4], 1) the solution returned [1, 2, 3, 4] unexpectedly.

### Analysis

collapse all		Example tests
example		✓ OK
first example test		
1. 0.001 s		OK
example2		✓ OK
second example test		
1. 0.001 s		OK
example3		✓ OK
third example test		

2. 0.001 s **RUNTIME ERROR**, tested program termina  
code 2

stderr:

```
panic: runtime error: slice bounds out
```

```
goroutine 1 [running]:
```

```
solution.Solution(0x573a20, 0x0, 0x0,
    /tmp/./unlcpss/./src/solution/c
```

single

one element,  $0 \leq K \leq 5$

**x RUNTIM**

```

tested prog
terminated

```

2

1. 0.001 s OK

2. 0.001 s OK

3. 0.001 s **RUNTIME ERROR**, tested program termina  
code 2

stderr:

```
panic: runtime error: slice bounds out
```

```
goroutine 1 [running]:
```

```
solution.Solution(0xc208032288, 0x1, (
    /tmp/./kernsec/./src/solution/./
```

double

two elements,  $K \leq N$

✓ OK

1. 0.001 s OK

2. 0.001 s OK

small1

small functional tests,  $K < N$

✓ OK

1. 0.001 s OK

2. 0.001 s OK

small2

small functional tests,  $K \geq N$

**x RUNTIM**

```

tested prog
terminated

```

2

1. 0.001 s OK

2. 0.001 s **RUNTIME ERROR**, tested program termina  
code 2

stderr:

```
panic: runtime error: slice bounds out
```


```
goroutine 1 [running]:
```

```
solution.Solution(0xc20800a2d0, 0x6, (
```


3. 0.001 s **RUNTIME ERROR**, tested program termina  
code 2

stderr:  
panic: runtime error: slice bounds out

goroutine 1 [running]:  
solution.Solution(0xc20800a2d0, 0x5, (

small\_random\_all\_rotations       **OK**  
small random sequence, all rotations, N  
= 15

- 1. 0.001 s **OK**
- 2. 0.001 s **OK**
- 3. 0.001 s **OK**
- 4. 0.001 s **OK**
- 5. 0.001 s **OK**
- 6. 0.001 s **OK**
- 7. 0.001 s **OK**
- 8. 0.001 s **OK**
- 9. 0.001 s **OK**
- 10. 0.001 s **OK**
- 11. 0.001 s **OK**
- 12. 0.001 s **OK**
- 13. 0.001 s **OK**
- 14. 0.001 s **OK**
- 15. 0.001 s **OK**

medium\_random       **OK**  
medium random sequence, N = 100

- 1. 0.001 s **OK**
- 2. 0.001 s **OK**

maximal       **RUNTIM**  
maximal N and K      tested prog  
terminated  
2

- 1. 0.001 s **OK**
- 2. 0.001 s **RUNTIME ERROR**, tested program termina  
code 2

3. 0.001 s OK

4. 0.001 s OK