Problem Set 3 Exercise #12: Rotate Right K

Reference: Lecture 6 notes

Learning objective: One-dimensional array

Estimated completion time: 30 minutes

Problem statement:

[CS1010 AY2012/13 Semester 1 Midterm Test, Q9]

Write a program **PS3_Ex12_RotateRightK.java**.

Your program should contain a static method

```
void rotateRightK(int[] arr, int k)
```

that rotates the given array **k** positions to the right, where **k** is a positive integer.

For example, given an array **arr** = { 1, 2, 3, 4, 5, 6 },

- Calling **rotateRight(arr, 1)** would result in **arr** becoming { 6, 1, 2, 3, 4, 5 }.

- Calling **rotateRight(arr, 3)** would result in **arr** becoming { 4, 5, 6, 1, 2, 3 }.

- Calling **rotateRight(arr, 60002)** would result in **arr** becoming { 5, 6, 1, 2, 3, 4 }.

Note:

Ex #11 is your building block of this exercise.

Sample run #1:

```
Enter the number of elements: 6
Enter 6 elements: 1 2 3 4 5 6
Enter k: 1
[6, 1, 2, 3, 4, 5]
```

Sample run #2:

```
Enter the number of elements: 6
Enter 6 elements: 1 2 3 4 5 6
Enter k: 3
[4, 5, 6, 1, 2, 3]
```

Sample run #3:

```
Enter the number of elements: 6
Enter 6 elements: 1 2 3 4 5 6
Enter k: 60002
5 6 1 2 3 4
```