Problem Set 3 Exercise #06: Positive Numbers First

Reference: Lecture 7 notes

Learning objective: One-dimensional array; Simple algorithm design

Estimated completion time: 25 minutes

Problem statement:

[CS1010 AY2013/14 Midterm Test, Q8]

Write a program PS3_Ex06_PositiveFirst.java.

Your program should contain a static method

```
boolean isPositiveFirst(int[] numbers)
```

that returns true if all the positive numbers (if any) appear before all the non-positive numbers (if any) in an array, or false otherwise.

For example, it will return true for the array { 3, 1, -4, 0, -5 } because all the positive numbers (i.e. 3 and 1) in this array appear before the non-positive numbers (i.e. -4, 0 and -5).

As another example, it returns false for the array $\{3, 1, -4, 0, 5\}$ because the positive number 5 appears after the non-positive numbers (i.e. -4 and 0) in the array.

Sample run #1:

```
Enter the number of elements: 5

Enter 5 elements: 3 1 -4 0 -5

Positive numbers appear before non-positive numbers
```

Sample run #2:

```
Enter the number of elements: 5
Enter 5 elements: 3 1 -4 0 5
Some positive numbers appear after non-positive numbers
```