Problem Set 3 Exercise #08: Find Twice

Reference: Lecture 7 notes

Learning objective: One-dimensional array

Estimated completion time: 35 minutes

Problem statement:

[CS1010E AY2010/11 Semester 2 Exam, Q16(a)]

Write a program **PS3_Ex08_FindTwice.java**.

Your program should contain a static method

```
int findTwice(int[] arr)
```

that determines if any integer is repeated in the array. If so, this method returns the least index where the repeated integer resides; if not, it returns -1.

For example, it will return 1 for the array {1, 3, 5, 5, 4} because 3 is the first repeated integer in the array and index of its first appearance is 1.

A tip is given at the end of this page.

Sample run #1:

```
Enter the number of elements: 5
Enter 5 elements: 1 3 5 7 9
Array doesn't contain duplicated data
```

Sample run #2:

```
Enter the number of elements: 5
Enter 5 elements: 1 3 5 5 3
3 is the first element that appears at least twice
```

Useful tip:

Avoid duplicated comparisons. For example, if `arr[m]` has already been compared to `arr[n]`, then you shouldn't compare `arr[n]` to `arr[m]`.