Problem Set 3 Exercise #07: Find Twice

Reference: Lecture 7 notes

Learning objective: One-dimensional array

Estimated completion time: 30 minutes

Problem statement:

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

Write a program **find_twice.c** that contains a function

```
int find_twice(int arr[], int size)
```

This function determines if any integer is repeated in the array **arr**. If so, it returns the least index where the repeated integer resides; if not, it returns -1. You may assume that 1 ≤ **size** ≤ 10.

For example, it will return 1 for the array {1, 3, 5, 5, 3} 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 repeated data
```

Sample run #2:

```
Enter the number of elements: 5
Enter 5 elements: 1 3 5 5 3
3 is the first repeated integer
```

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]** again.