lab 04: Review of C++ Arrays

Instructions: This lab is to review arrays in C++. While Java arrays have similarities with C++ arrays, there are differences. First, Java arrays are objects, while C++ arrays are just sequential list of elements. The key usage difference is that C++ does not store any information about the array (like length.) Therefore any extraneous information must be stored separately.

Note: Your header file should be in src/arrays.hpp, your C++ code should be in src/arrays.cpp

I do not need a main file.
Implement the following functions:

```cpp
/* Returns the number of elements in the array that are less than 0. */
int countNegatives(const int array[], int size);

/* Find the smallest odd value in the array.
 * Returns -1 if there is not odd value in the array.
 */
int findMinOdd(const int array[], int size);

/* Returns the index in the array where value is found.
 * Return -1 if value is not present in the array.
 */
int search(const int array[], int size, int value);

/* Removes an item at position index by shifting later elements left.
 * Returns true iff 0 <= index < size.
 */
bool remove(int array[], int size, int index);
```

Testing:
Please write some test cases to ensure you code is working correctly. You may utilize CXXtestgen or write you own manual test cases in a main file.

How to turn in:
Turn in via GitHub. Ensure the file(s) are in your directory and then:

- $ git add <files>

- $ git commit

- $ git push

Webhook: The webhook is:
http://coins.csuniv.edu:2234/github/build-csci-315-fall-2017.php
Remember, after the first push, please wait 5-10 minutes for the auto-grader to get your repository. Then subsequent pushes should receive a grade.

Due Date: September 11, 2017 2359

Teamwork: No teamwork, your work must be your own.