lab 06: Review of C++ Arrays

How to Add the Webhook: To add the webhook:

1. Open up **your** github on Github.com
2. Go to settings.
3. Click Webhooks.
4. Click add webhooks.
5. The Payload URL is:
   http://csci.csuniv.edu:2234/github/build-csci-315-fall-2020.php
   Select json for content type.
6. Click add webhook.

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.

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:

```
/* 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 no 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 the 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

Due Date: September 09, 2020 2359

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