

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-spring-2019.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:

```
1 /* Returns the number of elements in the array that are less than 0. */
2 int countNegatives(const int array[], int size);
3
4 /* Find the smallest odd value in the array.
5  * Returns -1 if there is no odd value in the array.
6  */
7 int findMinOdd(const int array[], int size);
8
9 /* Returns the index in the array where value is found.
10  * Return -1 if the value is not present in the array.
11  */
12 int search(const int array[], int size, int value);
13
14 /* Removes an item at position index by shifting later elements left.
15  * Returns true iff 0 <= index < size.
16  */
17 bool remove(int array[], int size, int index);
```

Testing:

Please write some test cases to ensure your code is working correctly. You may utilize CXXtestgen or write your 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 23, 2019 2359

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