CSCI 112 Lab 2. Arrays and Methods.

Lab Objectives

- Be able to declare, instantiate and initialize arrays
- Be able to write instance methods that accept an integer array as a parameter
- Be able to write instance methods that accept a String array as a parameter
- Be able to write instance methods that return a value

Introduction

The goal of this lab is to gain experience with arrays of different types and processing arrays using methods. You will only need one Java class that will contain several methods. Note: the only documentation you need for labs is your name in source code. It is not necessary to document the code. This only applies to labs—you do need to document programming assignments.

Step 1

1. Declare, instantiate and initialize two arrays:
   - One containing at least 10 ints of your choice
   - One containing the seven Strings of the days of the week.

Step 2

1. Write a method that accepts the int array and prints it out all on one line.
   Make sure you don't hardcode (use a constant) for the length of the array.
2. Write a method that accepts the String array and prints it out one string per line.
3. Call the two print methods from your main and verify they work.

Step 3

1. Write a method to accept the int array and return a count of the number of odd values in the array.
2. Test the method by calling it from main and displaying the result.

Step 4

1. Write a method that accepts the String array and returns the total number of characters in all of the strings. Note that if the array is sArray, the length of the ith string is sArray[i].length().
2. Test the method by calling it from main and displaying the result.
Step 5 – This step is optional, but try it if you have time!
1. Write a method that accepts an int array and returns an array that contains the same values, but in reverse order. That is if the original array had three elements: 45, 89, 12. The reverse array would have elements: 12, 89, 45.
2. Test the method by calling it from main and displaying the resulting array (by calling the method written in Step 2.1 above).

Step 6 – This step is necessary to get credit for the lab!
1. Run your program for the TA.
2. Export the project.
3. Upload the zip file (or .java) to Lab2 on Blackboard. Don’t upload .class file!
4. Sign and turn in your lab sheet to the TA.