

INTRODUCTION TO COMPUTER SCIENCE I

LAB 4

A brief introduction to arrays

1 Working with arrays

In this lab, we simply want to get started with arrays. **Your job is to write two new methods** (which you will see when you download the initial source code):

1. Write a method called `print` that, given an `int[]` parameter, prints the contents of that array. The elements should appear one per line, showing both the array index and the value at that index, like this:

```
[0] = 3
[1] = 6
[2] = 13
[3] = 2
[4] = 6
```

2. Write a method called `reverse` that, given a `int[]` parameter, reverses the order of the elements in the array. For example, if the input array looks like the one above, then the printed result after reversal should be:

```
[0] = 6
[1] = 2
[2] = 13
[3] = 6
[4] = 3
```

This method should *not* print the reversed array. That is the job of the `print()` method.

Getting started: Create a new folder/directory for `lab-4`, and open/change into it. Then go to the following link for the starting code:

bit.ly/COSC-111-lab-4-source

You should save this file into your `lab-4` directory with the name `Arrays.java` and then open the code into *Emacs/Aquamacs*.

Your task: Implement the two methods described above (`print()` and `reverse()`). Compile, debug, and test your code until you get results that look something like this:

```
$ java Arrays
Making array...
[0] = 0
[1] = 0
[2] = 0
[3] = 0
[4] = 0
[5] = 0
[6] = 0
[7] = 0
[8] = 0
[9] = 0
Filling array with random numbers...
[0] = 757
[1] = 725
[2] = 335
[3] = 454
[4] = 116
[5] = 484
[6] = 562
[7] = 49
[8] = 613
[9] = 982
Reversing array values...
[0] = 982
[1] = 613
[2] = 49
[3] = 562
[4] = 484
[5] = 116
[6] = 454
[7] = 335
[8] = 725
[9] = 757
```

2 Submit your work

Submit your `Arrays.java` source code file at:

www.cs.amherst.edu/submit

This assignment is due on Thursday, March-07, 11:59 pm.