

COMP 110/L
Fall 2022

Lecture 15 Handout

1.) The following code is intended to print out all the command-line arguments. However, it doesn't work correctly. What's going wrong, and how can it be fixed?

```
public static void main(String[] args) {
    for (int index = 0; index <= args.length; index++) {
        System.out.println(args[index]);
    }
}
```

2.) The `indexOf` method is intended to return the first index of a given array which contains the given element. If the array doesn't contain the element, it should return -1. Some example calls are shown below:

```
int[] arr = new int[2];
arr[0] = 5;
arr[1] = 8;
System.out.println(indexOf(arr, 8)); // prints 1
System.out.println(indexOf(arr, 5)); // prints 0
System.out.println(indexOf(arr, 7)); // prints -1
```

Implement `indexOf` below.

3.) The `sum` method is intended to return the sum of the given array. If the array is empty, it should return 0. Implement `sum` below. The signature is provided.

```
public static int sum(int[] array) {
```

4.) The `product` method is intended to return the product of the given array (i.e., the result of multiplying all elements together). If the array is empty, it should return 1. Implement `product` below. The signature is provided.

```
public static int product(int[] array) {
```