

**COMP 110/L
Fall 2022**

Lecture 13 Handout

1.) Consider the following code:

```
String x = "abc";
```

Write a line of code that will extract the first character (at index 0) in `x`. This should be saved in a new variable named `y`.

2.) Consider the following code.

```
double[] myArray = new double[3];  
myArray[0] = 3.14;  
myArray[1] = 1.44;  
myArray[2] = 2.8;
```

2.a.) Write an expression that will access `1.44` in `myArray`.

2.b.) Write a statement that updates `myArray` so that the value at position 2 (currently `2.8`) instead holds `87.5`.

2.c.) Write an expression that evaluates to the number of elements in `myArray`.

2.d.) Draw a memory diagram representing how `myArray` looks in memory.

3.) Consider the following code, which is compiled and run with the command-line arguments `hi` and `bye` (i.e., `java MyProgram hi bye`)

```
public class MyProgram {
    public static void main(String[] args) {
        System.out.println(args.length);
        System.out.println(args[0]);
        System.out.println(args[1]);
    }
}
```

3.a.) What is the output of `MyProgram` for these command-line arguments?

3.b.) Write a memory diagram representing how `args` looks in memory for this input.

4.) Create an array of `int` holding only the values `9` and `7`, in that order.

5.) Assume that `x` is a `String` variable holding the string representation of some unknown number (e.g., `"123"`). Declare an `int` variable named `asInt`, and assign `asInt` the `int` representation of `x`. As a hint, you'll need to use `Integer.parseInt`.