

COMP 110/L
Fall 2022

Lecture 8 Handout

1.) Define a class named `MyClass`, which has the following components:

- A `String`, which is accessible **outside and inside** of `MyClass`
- An `int`, which is accessible **only inside** of `MyClass`
- A constructor, which initializes the `String` and the `int` to some input `String` and `int` values. An example call is in question 2.

2.) Define a `toString()` method for `MyClass`, which will concatenate the `String` instance variable and the `int` instance variable, returning the result. For example, consider the following code:

```
MyClass example = new MyClass("bar", 28);  
String result = example.toString();  
System.out.println(result); // prints "bar28"
```

Strictly speaking, `toString()` needs to be defined inside of `MyClass` itself, but for this problem, you only need to define the `toString()` method without the rest of the class.

3.) Define a getter for the `int`, named `getInt`. You need only to define the method.

4.) Define a setter for the `int`, named `setInt`. You need only to define the method.

5.) Draw a memory diagram below showing how memory looks like just before `main` terminates.

```
public class Temp {
    private int x;
    public Temp(int a) {
        x = a;
    }

    public static void main(String[] args) {
        Temp t1 = new Temp(5);
        Temp t2 = t1;
        Temp t3 = new Temp(6);
        t3 = t2;
        // diagram for t1, t2, t3
    }
}
```