

Review & Practice

It's probably been a while since you have actually sat down and worked with some Java code. The point of this warm-up exercise is to get you back into the groove before we look at some of the deeper problems you are encountering.

Remember, you are here because you wanted to be, and because you need some help. I am not going to stop you from working with your peers on these, but I **strongly recommend** you work alone so that you can properly identify where **you** yourself are having troubles.

1. Identify any problems with the following code snippets, and make the appropriate corrections (there may be zero or more than one in each):

```
-----  
public class meal {  
    String description;  
    int price;  
}
```

```
-----  
public void blah(String name) {  
    if(name == "Blah") {  
        System.out.println("You have an interesting name");  
    }  
}
```

```
-----  
int[] numbers = int[5];  
numbers[1] = 1;  
numbers[3] = 3;  
numbers[5] = 5;  
-----
```

```
public class Something {
    private JFrame j;
    private double x;

    public Something() {
        j.show();
        j.setSize(20, 20);
    }

    public int getX(){
        return x;
    }
}
```

(in Dr. Java's interactions pane)

```
Something s = new Something();
int x = s.getX();
```

2. Write the output of each of the following:

```
-----
int[] numbers = new int[5];
numbers[1] = 1;
numbers[3] = 3;
System.out.println(int[1]);
System.out.println(int[2]);
System.out.println(int[3]);
```

```
-----
Something[] s = new Something[4];
System.out.println(s[1]);
System.out.println(s[2].getX());
```

3. How can you re-write the following code snippets? Show the re-written code.

```
int[] numbers = new int[5];
numbers[0] = 1;
numbers[1] = 2;
numbers[2] = 3;
numbers[3] = 4;
numbers[4] = 5;
System.out.println(int[0]);
System.out.println(int[1]);
System.out.println(int[2]);
System.out.println(int[3]);
```

```
public boolean boo(int x) {
    if(x > 5) {
        return true;
    } else {
        return false;
    }
}
```

```
public int silly(int w) {
    int r = 0;
    if(w < 3) {
        r = -1;
    } else if(w >= 3 && w <=8) {
        r = 0;
    } else if(w > 8) {
        r = 1;
    }
    return r;
}
```

4. Complete the following method which swaps the first and last elements of the array passed to it.

```
public static void swap(int[] nums) {
```

```
}
```

Is there any point to this method if it doesn't return anything? Explain.

5. Write a very basic class `PopMachine` that contains private instance variables called `coke`, `gingerale` and `orangecrush`, each of which store an integer. When an instance of `PopMachine` is created, there should be 10 cans of each kind of pop in the `PopMachine`. Define three methods in `PopMachine` called `buyCoke`, `buyGingerale` and `buyOrangecrush`, which take no arguments, and reduce the number of that kind of pop in the machine by one. (For now, you can ignore the case of when they reach 0.)