

## **SCJA Exercises Day 1**

- Setting up and running your first Java program
- Modifying a Java application, recompiling and running

### **Setting up and running your first Java program**

Follow Sun's tutorial here to set up and run your first Hello World program:

<http://java.sun.com/docs/books/tutorial/getStarted/cupojava/index.html>

See the command line exercise:

For windows users: <http://java.sun.com/docs/books/tutorial/getStarted/cupojava/win32.html>

For Linux users: <http://java.sun.com/docs/books/tutorial/getStarted/cupojava/unix.html>

### **Modifying a Java application, recompiling and running**

```
1. public class RobotManager {
2.     public static void main(String[] args) {
3.         Robot robot;
4.         int nargs=args.length;
5.         if(nargs <= 1){
6.             System.out.println("There must be at least two arguments in the
              command!");
7.             System.out.println("Example: java RobotManager Mary Kaan");
8.             System.exit(0);
9.         } else {
10.            for(int i=1; i<nargs; i++){
11.                robot = new Robot();
12.                robot.setName(args[i]);
13.                robot.sayHelloTo(args[0]);
14.            }
15.        }
16.    }
17. }
18. class Robot {
19.     private String myName = "nobody";
20.     public void setName(String name) {
21.         myName = name;
22.     }
23.     public void sayHelloTo(String name) {
24.         System.out.println("Hello " + name + "!");
25.         System.out.println("I'm Robo" + myName + ".");
26.     }
27. }
```

You can download this code from this website:

<http://www.apress.com/9781590596975> (under the 'Source Code/Downloads' tab)

- 1)Open a text editor
- 2)Copy the above source into RobotManager.java (you will need to remove the source code line numbers 1.-27.) and save
- 3)Open a command window
- 4)To compile, execute: `javac RobotManager.java`
- 5)To run, execute: `java RobotManager Ginny 420`
- 6)This generates the following output:  

```
    Hello Ginny!  
    I'm Robo420.
```
- 7) Now try it with three arguments: `java RobotManager Ginny 420 421`
- 8)And then: `java RobotManager Ginny 420 number1`
- 9)What happens?
- 10)Try running it with only one command line argument: `java RobotManager Ginny`
- 11)What happens? (Hint: Look at the if statement (line 5))
- 12)Modifying a Method: Modify the text on line 24 From: "Hello " to "Hello, how are you " Recompile and run the program
- 13)Modify the text on lines 24 and 25: Switch name and myName
- 14)Recompile and run the program
- 15)Introduce an error: change the myName on line 24 to myname (lowercase).
- 16)Try to recompile. What is the result?