

CSC 220 – Lab 1

Due: 11:59pm, Feb 5, 2016

Objective:

Complete several small programs in Java based on examples in your text.

Java programs:

1. Write an application that prints the following letter sequence. Don't print any unneeded characters. (That is, don't make any character string longer than it has to be.) Name the class that contains the solution for this program **Banner**.

```
***      ***      *****
****     ***      *****
*****   ***              ***
***  **  ***              ***
***   *  ***          ***   ***
***    *****        ***   ***
***      ****          **   ***
***      ***          *****
```

Hint: The program looks like the following

```
/******
 * Programmer: your name
 * Instructor: Dr. Tao
 * Course: CSC220-03
 *
 * Banner.java
 * This program prints out a banner composed of asterisks.
 * The banner should look like the following:
    ***      ***      *****
    ****     ***      *****
    *****   ***              ***
    ***  **  ***              ***
    ***   *  ***          ***   ***
    ***    *****        ***   ***
    ***      ****          **   ***
    ***      ***          *****
*****
public class Banner {

    // Prints a CS220 composed of asterisks to the screen

    public static void main(String[] args) {

        // ----- ENTER YOUR CODE in the following -----

    } // method main
} //class Banner
```

2. *Using Strings.* Write a program **HelloPal.java** that takes two names as command-line arguments and prints out the greeting specified below.

```
$ java Hello Alice Bob
Hello, Alice! I am Bob.
```

The program structure is listed in the following:

```
public class HelloPal {
    public static void main(String[ ] args) {

        // you use System.out.println() and args[0] and args[1]
        // to print out the line
        // Please note Java treat args[0] and args[1] as strings

    }
}
```

Compiling and running Java programs (reminder):

1. Compile your programs using the command `javac filename`
For example: `javac myProgram.java`
If you receive errors during the compilation phase, re-edit the source code file and attempt to correct them.
2. Once a file successfully compiles, execute it using the `java` program.
For example: `java MyProgram`

What to turn in:

1. JAR all your files, including `*.java` and `*.class` files into a file called `Lab1.jar`. When you're done, upload the JAR file to Canvas.
2. If you do not complete the assignment before the end of the lab, you have until 11:59pm on Friday, Feb 5, to complete the assignment and have your Jar file uploaded to Canvas. Canvas time rules! No extensions.

Hints:

1. Create a directory named `csc220` under your home directory. Use the Unix terminal and the appropriate command to do so. That is, do not use the window system to create the directory. Next, change your working directory in the terminal to be that new directory and then create a **Lab1** directory in/under the **csc220** directory. Place all of your work for this laboratory in the **Lab1** directory.
2. The name of the file has to be the same as the name of the class (add `.java` to the end).
3. Add a comment to the beginning of each of your programs containing your name, the name of the course, and the title of the assignment:

```
/*****  
 * Programmer: your name  
 * Instructor: Dr. Tao  
 * Course: CSC220-03  
 * Lab1 Part1 etc.  
 *****/
```