CIS 2571: Introduction to Java
Lab Assignment

Name: _____

Lab Assignment	#2 – Selection and Looping
Due Date *(end of class)*	02/10/2014
Points	**SRPGame** Java Program source code output _____/ 20 pts. **CompCD** Java Program source code output _____/ 30 pts. **Total** _____**/ 50 pts.**

Lab Assignment #2 Activities

1. On your own, create a Java program to solve the **Chapter 3 Programming Exercise 3.17** *(Game: scissor, rock, paper)* on page 124 of your textbook. Use either the **console or a dialog box for both input and output**.

    a. Create the source code file, **SRPGame.java**. Add a block comment at the top of the file to identify your name, file, date, class, assignment, and short description of the program. *(3 points)*

    b. Use the static class method, **Math.random()** to generate a pseudorandom **double** number greater than or equal to 0.0 and less than 1.0. Section 3.8 Generating Random Numbers on page 96 in your textbook covers the use of random numbers with a small example. The following Java API provides the documentation on how to use this static method: *(5 points)*

    http://docs.oracle.com/javase/7/docs/api/java/lang/Math.html#random()

    c. Compile the source code until no errors are found. The Java bytecode file **SRPGame.class** should be created.

    - Common Errors: http://www.cs.armstrong.edu/liang/intro9e/debug.html

    d. Run the Java bytecode and observe the results.

    e. Attach a hardcopy printout of your source code. *(10 points)*

    f. Attach a hardcopy printout of your sample output ***using the example in the textbook as your test case***. *(2 points)*

2. On your own, create a Java program to solve the **Chapter 4 Programming Exercise 4.31** *(Financial application: computing CD value)* on page 172 of your textbook. **Use the console for both input and output**. Using the static method, **System.out.printf**, format your console output to match the example given in the textbook. *(5 points)*

    a. Create the source code file, **CompCD.java**. Add a block comment at the top of the file to identify your name, file, date, class, assignment, and short description of the program. *(5 points)*

    b. Compile the source code until no errors are found. The Java bytecode file **CompCD.class** should be created.

        - Common Errors: http://www.cs.armstrong.edu/liang/intro9e/debug.html

    c. Run the Java bytecode and observe the results.

    d. Attach a hardcopy printout of your source code. *(15 points)*

    e. Attach a hardcopy printout of your sample output ***using the example in the textbook as your test case***. *(5 points)*