CSC 220 – Lab 4

Objective:
Write complete Java programs.

Java programs:

1. Write an application named `Account.java` that prompts for and reads (using scanner) the user's first name and last name (separately). Then print a string composed of the first letter of the user's first name, followed by the first five characters of the user's last name, followed by a random number in the range 10 to 99. When user's last name is less than five characters, use the whole last name. Similar algorithms are sometimes used to generate usernames for new computer accounts.

2. Write an application named `Area.java` that uses command line arguments to read the lengths of the sides of a triangle from the user. Compute the area of the triangle using Heron's formula (below), in which s represents half of the perimeter of the triangle, and a, b, and c represent the lengths of the three sides. That is,

$$s = \frac{a + b + c}{2}$$

   Print the area to three decimal places.

$$Area = \sqrt{s(s-a)(s-b)(s-c)}$$

   Make sure you indent and comment your code based on the examples in the textbook. Don't forget to include your name, the course number, title of the assignment, and today's date.

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:

JAR your `*.java` files into a file called `Lab4.jar`. When you're done, upload the JAR file to Canvas. Canvas time rules! No extension.