CSC 1051 - Lab 2

Objectives:
Learn about Input/Output and practice writing algorithms.

1. Using GPA03.java as a starting point, update it so that the result of the division is correct and so that it inputs the quality points and number of credits from the user (ie, make the necessary updates to change it to GPA05.java, as described in last week’s lecture).
See
http://www.csc.villanova.edu/~map/1051/02javabasics.pptx
http://www.csc.villanova.edu/~map/1051/examples/GPA03.java

```java
//*********************************************
//  GPA03.java     Example program from CSC1051
//                    Villanova University
//  Prints out a GPA. (buggy version)
//*********************************************

public class GPA03
{
    public static void main (String[ ] args)
    {
        int qp = 52;
        int credits = 16;
        double gpa = qp / credits;

        System.out.println("Quality Points: " + qp);
        System.out.println("Credits: " + credits);
        System.out.println();
        System.out.println("\tGPA: " + gpa);
    }
}
```

Be sure to test it to verify that it works well.

Initials: ________________________________
2. Below is the skeleton of a program for experimenting with java and with simple programming projects. Type it in and verify that it compiles and runs as expected.

```java
//***********************************************************
// Something.java   Author: Your name goes here
//         9/10/2012 (be sure to update)
//***********************************************************
public class Something
{
    public static void main (String[] args)
    {
        System.out.println("Welcome to my program."
                        + " This program was written as a solution"
                        + " to an exercise in my textbook.");
    }
}
```

3. Using the above program skeleton, we will now work on some projects from the text. Try do do as many as you can, but at least do the ones listed here. PP 2.3, page 109:

- Try do as many of the Programming Projects on page 109 as you can, but at least do the ones listed here.
- Be sure to use appropriate names: PP_2_3.java PP_2_4.java, etc
- Update all the comments; include the statement of the problem.
- Use appropriate variable names – (e.g., name, age, college, petname)

PP 2.3 Write an application that prompts for and reads a person’s name, age, college and pet’s name. Then print a paragraph inserting the appropriate data. For example:

```
Hello, my name is name and I am age years old. I’m enjoying my time at college, though I miss my pet petname very much!
```

Initials: __________________________
2.4 Write an application that reads two floating point numbers and prints their sum, difference, and product.

4. We will discuss the algorithm for PP2.9 in class. Be sure to write it below before writing your program.

2.9 Create a version of the previous project that reverses the computation. That is, read a value representing a number of seconds, then print the equivalent amount of time as a combination of hours, minutes, and seconds. (For example, 9999 seconds is equivalent to 2 hours, 46 minutes, and 39 seconds.)