CSC 1051 - Lab 2

Objectives:
Do PP 2.2, 2.4, 2.8, 2.9 to get some practice with IO, and writing algorithms.

1. Skeleton of program for experimenting and programming projects – type this into jGrasp (use File ➔ New ➔ Java).

```java
// PP_something_something.java       Author: Your name goes here
//                            9/2/2011 (be sure to update)
// Solution to PP ???
// from Java Software Solutions by Lewis&Loftus

public class PP_something_something
{
    // This program does 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.");
    }
}
```

2. Implement the program PP_2_2.java (solution to PP 2.2) using the above program skeleton

2.2 Write an application that reads three integers and prints their average.

Initials (Instructor/TA): ________________________________
At this point we will change the display size on jGrasp \textit{Settings} \rightarrow \textit{Font} \rightarrow \textit{CSD font Size}]

- Mine set to 20
- Yours set to 10
This makes it easier to fit more on your screen at the same time.

3. We will discuss the algorithm for PP 2.8 in class.

2.8 Write an application that reads values representing a time duration in hours, minutes, and seconds and then prints the equivalent total number of seconds. (For example, 1 hour, 28 minutes, and 42 seconds is equivalent to 5322 seconds.)

Write the algorithm here:

\textit{Algorithm}

4. Now write a Java program \texttt{PP\_2\_8.java} that implements the algorithm.

Initials (classmate): \______________________________
5. Write an algorithm for PP 2.4

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

Algorithm

Initials (classmate): ________________________________

[Optional: Write a program corresponding to this algorithm]
6. We will discuss the algorithm for PP2.9 in class.

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.)

Algorithm

7. Now write a program for PP2.9

Initials (Instructor/TA):

- Program for 2.2 (average – checked already) ________________________________
- Program for 2.8 (sum up the hours, min, sec) ________________________________
- Algorithm for 2.4 ________________________________
- Program for 2.4 (optional) ________________________________
- Program for 2.9 ________________________________

Optional: do some more of the programming exercises PP2.3-2.7. The more you practice, the easier it gets. Be sure to practice writing algorithms too.