Lab 2

Objectives:
- Learn about variables and keyboard input to Java programs.
- Experiment with simple arithmetic including integer division
- Practice expressing algorithms in simple, unambiguous pseudocode

A. Implement a Java application Lab2A.java that uses variables to output a personalized message of the following form:

Hello, my name is Daphne and I am 18 years old. I’m enjoying my time at Villanova, though I miss my pet Luca very much!

Substitute your name, age, and pet name. If you don’t have a pet, maybe try one of these: http://www.medievalists.net/2013/06/23/medieval-pet-names/

Hints:
1) Include the following variable declarations, right at the beginning of the main method (i.e., before you print anything):

```java
String name = "Daphne";
String petName = "Luca";
int age = 18;
```

2) Incorporate the variables in your printing statements.

Check your work with a classmate – verify that Lab2A.java works as stated.

Classmate signature: ______________________________________

B. Now create a new version Lab2B.java that obtains the values of the variables name, petName, and age as input from the keyboard.

```java
Please enter name: Anne Boleyn
Please enter pet name: Purkoy
Please enter age: 32
Hello, my name is Anne Boleyn and I am 32 years old. I'm enjoying my time at Villanova, though I miss my pet Purkoy very much!
```

Check your work with a classmate – test each other’s programs to ensure they work well.

Classmate signature: ______________________________________
C. Create a Java application **Lab2C.java** that inputs 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.)

- Start by writing the algorithm here:

- type in your algorithm as comments in a java file
- Then develop the application by filling in the java code corresponding to each step

  *Check your work with a classmate – compare algorithms and test each other’s programs to ensure they work well.*

  **Classmate signature:** ________________________________

D. Create a Java application **Lab2D.java** that reverses the above process. That is, input 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.)

- Start by writing the algorithm here:

- type in your algorithm as comments in a java file
- Then develop the application by filling in the java code corresponding to each step

  *Check your work with a classmate – compare algorithms and test each other’s programs to ensure they work well.*

  **Classmate signature:** ________________________________

When finished, have the instructor or TA check your work and initial your worksheet.