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September 7, 2023.

DUE SEPT 11

CSCI 201
Prof. Sanft

Homework 3

Questions to answer!

EX 5.2 List some attributes and operations that might be defined for a class called `PictureFrame` that represents a picture frame.

Attributes: Size (Length, width), material type, color.
Operations: compute area, set length, set width, set material, set color

EX 5.3 List some attributes and operations that might be defined for a class called `Meeting` that represents a business meeting.

Attributes: Date, Time, Place, Topic, Names, Role
Operations: Set date, set time, set topics, set roles

EX 5.8 Write a method called `random100` that returns a random integer in the range of 1 to 100 (inclusive.

-With Caleb
File Name: EX5_8.zip

EX 5.15 Write a method called `larger` that accepts two floating point parameters (of type `double`) and returns true if the first parameter is greater than the second, and returns false otherwise. EX 5.15 (2 points; write it as if it is an instance method of some class)

```
public static boolean larger(double first, double second) {
        boolean result = first > second;

        return result;
```

EX 5.22 Write a method called `average` that accepts two integer parameters and returns their average as a floating point value. (2 points; write it as if it is an instance method of some class)

```
public static double average (int x, int y ) {

    double result = ( (x+y) / 2.0 );
    System.out.println(result);
    return result;
```

Programing Projects! (10 points each)

PP 5.5 Design and implement a class called `Dog` that contains instance data that represent the dog's name and age. Define the `Dog` constructor to accept and initialize instance data. Include getter and setter methods for the name and age. Include a method to compute and return the age of the dog in "person years" (seven times the dog's age). Include a `toString`method that returns a one-line description of the dog. Create a driver class called `Kennel`, whose `main` method instantiates and updates several `Dog` objects.

- with Caleb
Dog.zip
kennel.zip

PP 5.6 Design and implement a class called `Box` that contains instance data that represent the height, width, and depth of the box. Also include a `boolean` variable called `full` as instance data that represent whether the box is full or not. Define the `Box` constructor to accept and initialize the height, width, and depth of the box. Each newly created `Box` is empty (the constructor should initialize `full` to false). Include getter and setter methods for all instance data. Include a `toString`method that returns a one-line description of the box. Create a driver class called `BoxTest`, whose `main` method instantiates and updates several `Box` objects.

-with Caleb
Box.zip
Boxtest.zip

PP 5.13 Design and implement a class called `Card` that represents a standard playing card. Each card has a suit and a face value. Create a program that deals five random cards.

-with Caleb
Cards.zip