# CSC 220 – Lab 9

**Objective**
Complete several small programs in Java based on examples in class. In this lab, you will play with class design.

**Java programs:**

**Dog Class**

- Design and implement a class called `Dog` that contains instance data that represents 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. The getter names MUST be "getName" and "getAge". The setter names must be "setName" and "setAge". 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.

**Die Class**

- Using the `Die` class defined in slides 07_Writing_Classes.pdf, design and implement a class called `PairOfDice`, composed of two `Die` objects. Include methods to set and get the individual die values, a method to roll the dice, and a method that returns the current sum of the two die values. Create a driver class called `RollingDice2` to instantiate and use a `PairOfDice` object. The driver should call *each method* of the `PairOfDice` object.

**What to turn in:**

JAR your `*.java` files into a file called `Lab9.jar`. When you're done, submit the file to Canvas by the deadline. No extensions.