Written exercises # 1

1) Consider an object called space shuttle. Among the following, select what would describe the state of the object, and what would be a behavior of the object.
   a. The speed of the shuttle when reentering the Earth atmosphere.
   b. The maximum payload that the shuttle can carry.
   c. The act of docking the shuttle to the international space station.
   d. The act of starting the shuttle engine.

2) For each of the objects listed below, give the name of a class that this object could be an instance of. Name the class following the Java style guidelines.

Example: for the object “a cell phone”, a possible class name could be CommunicationDevice.
Don’t just restate the name of the object for the name of the class (e.g. CellPhone).

   a. A pair of glasses
   b. A wallet
   c. A movie theater
   d. A Walmart store
   e. A subtraction such as 8 – 2 = 6
   f. A novel

3) Draw the class diagram for the following class:
   public class Dog {
       private String name;
       private int age;

       public Dog(String n, int a) {
           // code
       }

       public void bark() {
           //code
       }

       public boolean eat(String food) {
           // code
       }
   }