Tutorial 1b (Week 2)

Note: In all defined methods in a class, you must make use of getter and setter methods to access the attributes in the class, except the getter and setter.

1. Write a class called Flight that represents an airline flight. It should contain instance data that represents the airline name, flight number, and the flight's origin and destination cities. Define the Flight constructor to accept and initialize all instance data. Include getter and setter methods for all instance data. Include a toString method that returns a one-line description of the flight. Create a driver class called FlightTest, whose main method instantiates and updates several Flight objects.

2. Write a class called Box that contains instance data that represents the height, width, and depth of the box. Also include a boolean variable called full as instance data that represents 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.

3. Write 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. Include a method to com- pute 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.

4. Create a class named Sandwich. Data fields include a String for the main ingredient (such as *tuna*), a String for bread type (such as *wheat*), and a double for price (such as 4.99). Include methods to get and set values for each of these fields. Include a toString method that returns a one-line description of the sandwich. Create a driver class called SandwichTest, whose main method instantiates and updates several Sandwich objects.