Coding Assignment 5 – Your own class

For this assignment you will be creating your own class. Be creative, it can be anything (school appropriate). Your class should be UNIQUE (ie only you are doing it). Your class has the following requirements:
- At least 3 variables   (3 pts) **MUST be private
- A default constructor (you decide the default values for the variables) (3 pts)
- A second constructor that takes in all variable values (3 pts)
    - Do some kind of check on at least one of the variables and override user input if it does not meet your check (2 pts)
- Getters for all variables (3 pts)
- Setters for all variables (3 pts)
- toString method that prints values of all variables in a logical sentence (3 pts)
- At least one other method that has your class DO something. For instance, if I created the class Frog, I could have a method that makes the Frog jump(). This method should print out what is happening. (3 pts)

Then create a runner program. **CodingAssignment5Runner.java** In the runner:
- Create an ArrayList of your class type. (2 pts)
- Create at least 4 of your type and put into the ArrayList. (4 pts)
- Use the .set method to change one of the items (2 pts)
- Use the .remove method to remove one of the items (2 pt)
- Print out each one using a **for each loop** through the ArrayList. (4 pts)
- Reset at least 2 class instance variables using the setters. (2 pts)
- Show the values changed using System.out.println with the getters. (3 pts)
- Call the method that has your type DO something on at least 2 of your objects – it should have a print statement in it that says what it is doing. (3 pts)

Code is commented in header and above methods, algorithm is detailed, braces aligned, code is indented properly, code is nicely spaced, output is nicely spaced, no spelling errors, java naming convention for variables correct: (10 points)

Total points: 55

You will need to submit **2 .java files** – your class and the runner. A template for the runner is given. You should create your class in its own .java file. Both files **MUST have the name/period/program description/honor code statement** at the top. Call your runner file **CodingAssignment5Runner.java and your class file ObjectName.java (whatever your object is).**

Sample Run if I created the frog class, with variables for name, type and weight.

```
A list of my Frogs:
Sam the Bullfrog weighs 35.1 grams                      //this is from toString
Harry the Treefrog weighs 22.7 grams.
Lucinda the Poison Dart frog weighs 16.9 grams.
Rochelle the Goliath frog weighs 2700.4 grams.

Sam's weight changed to 39.1 grams.            //Note: bolded items come from getters
Harry's type changed to Red-eyed Tree frog.    //not hardcoding

Sam jumps.
Harry jumps.
Lucinda jumps.
Rochelle jumps.
```