CS 102 – Computing and Algorithms II

Homework 1

1) (10 points) Follow the instructions for Inheritance lab.

2) (10 points) Follow the instructions for interface lab.

3) (20 points) Write a class that encapsulating the concept of daily temperatures of a week. Write the following methods:

    a. A constructor accepting an array of seven temperatures as a parameter.
    b. Accessor, mutator, toString, and equals methods.
    c. A method returning how many temperatures were below freezing.
    d. A method returning an array of temperatures above 100 degrees.
    e. A method returning the largest change in temperature between any two consecutive days.
    f. A method returning an array of daily temperatures, sorted in descending order.
    g. Write a client class to test all the methods in your class.

Style

Use white space (Indentation, blank lines) to show the program structure. A meaningful class name is an important part of the style. If should describe the purpose of the class. A meaningful name will be supplied as part of the design. Likewise, all variable and constant names will be meaningful and will follow naming conventions.

On top of each program should have the following comments:

```
/*
 * Name:
 * Date:
 * Question number:
 * Description:
*/
```

Deliverables

You will create a .java file for each of the questions and compressed them all in a zip file with your lastname and homework number (Lastname_HW1) and submit the zip file on Blackboard before the due date.

Grading