Lab 9

Due Date: **In class: 11/19**
Out of class 11/25

1. Write a class that performs math operations on elements in an array of type double and size 10.
    a. The constructor will accept as input an array of double. (in your parameter it should say double[] name)
    b. There should be a method the will return the difference between the largest and the smallest elements in the array of doubles.
    c. There should be another method that returns the sum of all the elements.
    d. Write another method that returns the number of elements above a value read in from the user in the tester class. You should send an explicit parameter to the method and compare each element in the array to this value.

There should also be a tester class that asked the user to input 10 values and put them in an array. The tester class should create an object of the math operations class and call each of the methods. The tester class should print all the values returned from the methods. In Class

2. Redo the above problem but use Array Lists instead. Out of class

3. Write a class that contains employees.

    a. You should have instance variable for the employee name and salary.
    b. You should have a constructor that initializes the instance variables.
    c. The class should have a method to return the name.
    d. There should be another method to return the salary.
    e. There should also be a method to calculate a bonus which is equal to 10 percent of the employee's salary. The bonus method should return the value of the bonus.

Write a tester class that will hold an array of employees.

Assume you can have 5 employees.

Ask the user to provide you with the name and the salary of each employee.

Create an employee.

Add the employee to the array.

After all the employees have been added, go through the array and calculate the bonus for each employee and print the result. In Class

4. Redo the above problem but use Array List instead. Out of class