Lab 10
CSC 1052 - Algorithms and Data Structures II
Grading: 30 points
Due Date: April 7th, 2017 at noon

Description: In this lab you will augment the basic functionality of the SortedArrayCollection class with four new methods. Once you have imported the files for the lab, you will add the following methods to the SortedArrayCollection class file. Create your own test driver to verify the methods are working. Implement the following methods:

1. `public String toString()` - creates and returns a string that correctly represents the current data in the collection. You may assume that the objects stored in the collection already have their own toString() method.

2. `public T smallest()` - returns `null` if the collection is empty, otherwise returns the smallest element of the collection.

3. `public int greater(T element)` - returns a count of the number of elements in the collection that are greater than `element`. Remember to use the `compareTo()` method for comparing objects.

4. `public SortedArrayCollection<T> combine(SortedArrayCollection<T> other)` - creates and returns a new SortedArrayCollection object that is a combination of `this` object and `other`.

Once you are finished, submit ONLY the modified file `SortedArrayCollection.java`.

Rubric:
(5 points) Lab compiles
(15 points) 5 points per correct method implementation across the first 3 methods.
(10 points) correctly implement `combine()`

Deliverables: Submit the source file on Blackboard.