CPS 501 **Assignment 7**

Assigned: 03/29/2020. Due: 04/02/2020, 11 pm (on Isidore).

Instructor: Tamisra H. Sanyal

1. Please add the following methods to your IntBuff class which is implemented in Assignment 1. Notice that you need auxiliary methods for internal use to perform recursive calls.

// Sorting the elements (ascending order) in the buffer using quicksort.

public void quicksort()

{

...

}

// Sorting the elements (ascending order) in the buffer using merge sort.

public void mergesort()

{

...

}

2. Please write a main method to perform the following tests on your new methods.

1) Create an integer buffer intbuff by appending the values 6, 5, 7, 10, 0, 1, -1, 3 to an empty one.

2) Display the content of the buffer.

3) Use the method call intbuff.quicksort() to sort the integers in the buffer.

4) Display the result.

5) Create a copy intbuff2 of intbuff using the copy constructor.

6) Use the method call intbuff2.mergesort() to sort the integers in the new buffer.

7) Display the result in intbuff2.