**Lab # 8**

Consider the following class definition:

public class LargeList {

private int[] pos;

public void **reset**(int[] newPos) {

this.pos = newPos;

}

1- Create a public instance method named gatValue that takes an integer parameter named 'target'. The method return 1 if the array contains the parameter value, otherwise return 0.

2- Create a public constructor that takes one integer named 'number'. Initialize pos to a new integer array of length number. Initialize the contents of the array to random integers, including the first entry. Each integer entry should be greater than the previous entry by a small random amount (e.g. +1...+10). All array values should be positive.

3- **Create a public copy constructor that takes a reference to another largeList object** . Perform a deep copy i.e. the new object will use its own position array.

4- Write a public method named equals which returns true only when two large lists are identical (ones in the same position).

Write a main method to test the class. Create two Largelist objects. Set the first list elements 3, 7, and 13. Set the second list elements to 3,7, 13 and 15. Check if the two lists are equal. Create a copy of the first list using the copy constructor. Check if they are equal. Reset the value of the copy object to 4 and 7. Check if the copy object is still equal to the first list.