# PROGRAMMING PROJECT 9- LINKEDINTLIST CLASS

CS 143

Complete the LinkedIntList class we started building during Lecture 16.

1) Your class must implement the following interface:

```
// Represents a list of integers.
public interface IntList {
    public void add(int value);
    public void add(int index, int value);
    public int get(int index);
    public int indexOf(int value);
    public boolean isEmpty();
    public void remove(int index);
    public void set(int index, int value);
    public int size();
    public void clear();
    public String toString();
    public void addSorted();
    //removes all elements of this.list that match Otherlist
    public void removeAll(IntList Otherlist);
    //removes all elements from this.list that are not included in Otherlist
    public void retainAll(IntList Otherlist);
}
```

2) Your class **must** be called LinkedIntList

3) Your `LinkedNode` class should be an inner class, so that you are only submitting one file to Canvas.

4) Your class will be tested in a driver program written by me. You code must work with my driver program which means you must fully and correctly implement the interface listed under item 1.

5) You must correctly comment and list the preconditions and post conditions for each method. (You may want to think about using Javadoc commenting style for this)

6) Your Class should be well encapsulated and enforce all preconditions for each method. **When** (not if), my driver program fails to properly abide by the appropriate preconditions, your class must throw an appropriate exception.

If you are unsure of what any of the methods are supposed to do, or what pre and post conditions a method should enforce, ask me.