Assignment: **#IntList**	Due: **04/07/02019**	Points: **3**

Specification

Copy the program IntList.java and implement the methods that have "TBI (To Be Implemented)" in their respective method comment blocks.

Numerous *class IntList* methods have been implemented, but the following are methods that you need to implement for this assignment.

```
public void growIntList();
public int car();
public IntList cdr();
public int search();
public boolean equals();
public boolean delete();
```

The "TBI (To Be Implemented)" methods are documented in their respective method comment blocks.

class IntList is an array-based implementation of a List data structure. It is necessary to read the existing code in order to understand what can be done with *IntList* objects.

The output of your program must match the following. The already coded *main()* method should not need any modifications. {output file}

```
list (before adds): ()
isEmpty() = true; size() = 0; capacity() = 4
...4 added
...-3 not added
...0 added
...9 added
...-8 not added
...0 added
...7 added
...0 added
list (after adds): (4 0 9 0 7 0)
isEmpty() = false; size() = 6; capacity() = 8
car(4 0 9 0 7 0) = 4
cdr(4 0 9 0 7 0) = (0 9 0 7 0)
car(0 9 0 7 0) = 0
cdr(0 9 0 7 0) = (9 0 7 0)
car(9 0 7 0) = 9
cdr(9 0 7 0) = (0 7 0)
car(0 7 0) = 0
cdr(0 7 0) = (7 0)
car(7 0) = 7
cdr(7 0) = (0)
car(0) = 0
cdr(0) = ()
search(4) found at index 0
search(-3) not found
search(0) found at index 1...3...5
search(9) found at index 2
search(-8) not found
search(0) found at index 1...3...5
search(7) found at index 4
search(0) found at index 1...3...5
(4 0 9 0 7 0).equals(4 0 9 0 7 0) = true
(4 0 9 0 7 0).equals(0 9 0 7 0) = false
list (before deletes): (4 0 9 0 7 0)
...4 deleted (0 9 0 7 0)
...-3 not found (0 9 0 7 0)
...0 deleted (9 0 7 0)
...9 deleted (0 7 0)
...-8 not found (0 7 0)
...0 deleted (7 0)
...7 deleted (0)
...0 deleted ()
list (after deletes): ()
instantiate a negative capacity IntList...
java.lang.IllegalArgumentException:
*** capacity must be > 0
```