Saving and Retrieving availableList

We now create two methods: One to save the availableList and one to retrieve it

In **Globals** we include
    the constant AVAILABLE_LIST_FILE = "_available.dat"

The file will be opened, I/O will happen, then it will be closed immediately. Thus, we do not need a global variable. A local variable within each method will be fine.

In the class **FileIO** we include the methods

```
public static int saveAvailableList(String fileName) {
    open a random access file f, with fileName, "rw", and truncate to 0
    for every node of availableList from head to tail {
        write the record number as an integer (use writeInt())
    }
    close f

    if process successful return Globals.PROCESS_OK
    else return Globals.PROCESS_ERROR
}

public static int retrieveAvailableList(String fileName) {
    open a random access file f, with fileName, "rw"
    nodes = calculate the total integers stored in f
        (use f.length() and INT_LEN for this calculation)
    instantiate a new availableList
    for (i = 0; i < nodes; i++) {
        read the next integer from f (use readInt())
        add to availableList (use addRecord() from AvailableList class)
```

```
        }
        close f

        if process successful return Globals.PROCESS_OK
        else return Globals.PROCESS_ERROR
    }
```

Testing

```
main() {
    instantiate availableList to an empty list
    add about 8 nodes to the list with availableList.addRecord()
        (use random integers as record numbers)

    call saveAvailableList()
    set availableList to null
    call retrieveAvailableList()
    print availableList
}
```

repeat testing a few times with more record numbers