This bonus assignment focuses on writing clients to test our code. Turn in the following files using the link on the course website:

- **ArrayIntList.java** – With fixes to the bugs you found and a short comment near it describing the bug
- **ArrayIntListTest.java** – A client program that exposes the bugs in ArrayIntList (see starter for example).

**Details**

This is an extra credit assignment meant to improve your testing abilities. The idea is to give you a chance to critically think about a program that you didn’t write. We’re starting off with a program you already know, to ease you into the idea. It’s only worth one point, with no partial credit.

You’ve worked with ArrayIntList before. The one given in this assignment is filled with bugs. Your job will be to find those bugs. For full credit, you must:

1. Write some code in ArrayIntListTest.java that exposes the bug by printing the incorrect output
2. Write a comment in ArrayIntList.java that briefly describes the bug. Start the comment with `// BUG:`
   - Example: `// BUG: The size is initialized to 1 in the empty constructor`
3. Fix the bug in ArrayIntList.java

The first bug is found for you, and code is written to expose it in ArrayIntListTest.java. However, the bug is not yet fixed. This is to give you a sense of what it means to find one. **You should fix this bug and move on to more.** For full credit, you must find at least 5 more bugs (not counting the one we found) in the broken ArrayIntList and complete the 3 tasks listed above for each.