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**Bonus 1: ArrayIntListTest (due Friday, July 14, 2017 at 11:30pm)**

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.