**Using Assert Statements to Test Your Program**

* To test your program, add assert statements to your code. The general format is:

assert booleanexpression;

* Use the keyword assert.
* The booleanexpression is a statement that returns true or false.
* End with a semicolon.
* Example:

IntArrayBag iab = new IntArrayBag();

iab.add(10);

iab.add(20);

assert iab.size() == 2;

* If the boolean expression is false, the program will crash. You will be able to see the line that caused the problem.
* If the boolean expression is true, the program will not show anything.

**Configuring Your Program to Run with Assertions Turned On**

In order for the assert statements to be executed, you will need to configure your program to use them.

* Right click on the .java file containing your assert statements.
* Click on Run As
* Click on Run Configurations
* Select the Arguments tab
* In the box for VM arguments, enter –ea (this is case sensitive so enter exactly –ea)
* Click Run

You only need to do this configuration set up once \*per program\*. After that, assertions will be tested every time this program runs. However, you must set up the configuration for each program.

To stop testing the asserts, just remove the –ea from the VM arguments.

Hint: Start your program with a statement like this:

assert false;

Your program will immediate crash at that line if you have correctly enabled asserts. Then comment out that line. You can be confident that the rest of your asserts will be tested.