

**Assignment 3.3: Binary Trees and Binary Search Trees**

Due: 8am, February 12, 2009

**Directions**

The problems for this assignment are described below. You will submit this assignment by emailing it to Mr. Wulsin. The file will be named “Assignment 3.3-LastName.zip”, where [LastName] is obviously your last name. All of your submitted assignments will be named in this fashion. The Zip file will contain a folder of the same name (so, “Assignment 3.3-LastName”), which will contain a folder for each of the subsequent problems. Each of these subfolders will have the name of its particular problem. Each of these problem subfolders will contain all of the necessary files for that particular problem. It’s very important that you follow all of these naming conventions exactly as specified.

**Problems****1) BinarySearchTree**

Fully implement the binary search tree (BST) as begun in section 23.5 of the book. Create a tester class to test BST methods `contains`, `add`, and `remove`. You *must* test your remove method extensively, since errors are often elusive.

**2) ExpressionEval (AB only)**

Do question 15 c, d, and e on pg. 598 of your book. Although not necessary, it would probably be helpful to at least look at the other parts. Be sure to create the necessary tester.

Note: You may notice that the guidance I’ve given you on these problems is quite minimal. As we progress through the year, you must become more comfortable with open-ended directions. Use the resources available to you (your book, the internet, and—lastly—your teacher). Figure it out.