## Lab 7

1. Download `LabBinaryTree.java` from `~dxu/handouts/labs/07`. This is the interface that specifies the implementation of a binary tree that we will use in the lab (slightly different from `BinaryTree.java` you saw in class).

2. Implement a `LinkedBinaryTree` that implements `LabBinaryTree`. Start with the methods `size`, `isEmpty`, `insert` and `printInOrder`, which prints out the nodes of the binary tree in in-order traversal order. `insert` allows you to add to the tree and `printInOrder` allows you to check the contents of your tree. Note that the interface requires that all listed methods be implemented, but you can simply leave the body empty for those methods that you wish to skip for now.

3. Test your methods by creating a `LinkedBinaryTree<Integer>` object in a driver class, and insert the following sequence of integers into the tree: `6, 4, 2, 7, 3, 9, 8, 5`. If all work well, it will create the binary tree as pictured. Use `printInOrder` to verify.
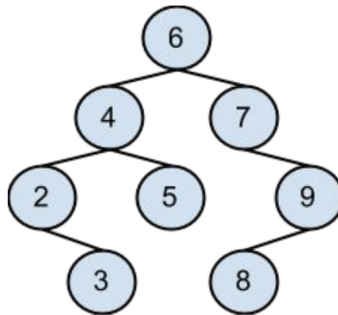
4. Proceed with implementing and testing `contains` and `height`.