Assignment 3

Due date: October 23th, 2017
Total points: 10

For practice, develop a priority queue `MaxPQTree` using a heap-ordered binary tree (linked nodes, each node has exactly 4 fields: item, parent, left, and right; the tree should have fields for the tree size and a reference to root node) instead of an array. `MaxPQTree` should support `isEmpty`, `size`, as well as `insert`, `max`, and `delMax` operations as discussed in the class. Write Javadoc for the class and all your public and private methods. No package name is needed.
Hint: you may need to write a helper function to locate the *k*th node.