1. Suppose we have a linked list where all the elements are stored in sorted order. Write a method `insertInOrder(item)` that inserts a new item into the linked list in sorted order.

2. Consider the recursive implementation of computing the Fibonacci numbers. Trace through the recursive calls for `fib_rec(5)` and show how many recursive function calls are made in total. Explain why this is bad and implement a solution of your choice that avoids excessive recursive calls.

3. Suppose our implementation of the binary tree did not explicitly maintain the `self.size` instance variable. Write an implementation of the method `getSize()` that computes the size of the binary tree by recursively visiting all nodes starting from the root.
4. Describe an implementation of the method `getMax()` that returns the node in a binary tree with the largest key. Suppose that you are not allowed to modify any of the other methods. Can you come up with a different implementation if you are allowed to modify `__init__` and `insert`?