Due Nov 26

1. Implements a binary search tree with addition. You don't have to implement delete on the tree. The nodes in the tree contain strings.

2. Use the Null Object pattern to add a null node to your tree to eliminate the need to check for null references or pointers in your tree.

3. Modify your Binary Search Tree that uses Null object to accept a Visitor. Implement a Visitor to produce the following representation of a search tree. Each node maps to (Value (Left Subtree)(Right Subtree)). So the representation of the tree below is (5 (3 () (4 () ()))(10 () ())).
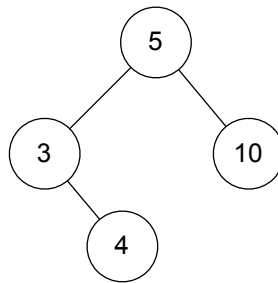
4. Use the Strategy pattern so that clients can provide an ordering that the tree will use to order its elements. Implement two orderings. The first ordering is the normal lexicographic (or alphabetic) ordering for strings. The second ordering compares strings by first reversing the string and then comparing the strings lexicographically. In the second ordering "az" would come after "bb".

Grading

Item	Percent of Grade
Working Code	20%
Unit Tests	10%
Proper implementation of Patterns	60%
Quality of Code	10%