CPE202

Lab6: Binary Search Tree

Due: 5/20 @10:00 PM

Partially Implement Binary Search Tree (BST)

Implement the following operations for a Binary Search Tree class starting from the template provided. Use the Class TreeNode that is provided. You should implement helper methods that make your code easier to write, read, and understand. You will also need to write test cases of your own as you develop the methods. You may use iterative or recursive functions in your implementation. (binary_search_tree.py and binary_search_tree_tests.py)

To implement BST use two classes, because you must be able to create and work with a BST that is empty. The class BinarySearchTree has a reference to the class TreeNode that is the root of the BST. The class TreeNode can provide many helper functions that make implementation in class BinarySearchTree much easier.

Submit the following file to PolyLearn

1. binary_search_tree.py
2. binary_search_tree_tests.py
3. queue_array.py

Write three tests for each method. Each method must have its own Test function, such as test_inorder, test_height, etc.