Critical Analysis

Some difficulties I found with my submission was understanding how rotation worked and how subtrees work which took a while for me to understand how these work. Some positive aspects of my submission though is understanding the concepts behind them by completing this submission.

Some key difficulties I had with this submission is figuring out how to write the equals function and remembering to use the CompareTo function along with using recursion on the same line of the return function. My methodology behind this was to see first and foremost are the same by using the CompareTo function to see if they are the same and then using the equals function along with the Boolean AND function so that it has to check if they are all true and check if root.Left and root2.Left are checked by the if statements to make sure that they are the same and the same with the root.Right and root2.Right to ensure that they are either equal to each other or not equal to each other.

My subtree function methodology works by seeing if the root is null and if it is null return false because the root is empty, then check if root2 is null which is a subtree of root and if it is null then return true because it means that it exists because we initially checked that if root has anything in it and if it goes past that check it means that root is not null and root2 exists so if it is null it will return true because it exists because root exists. Then I use the equals function seeing if root and roo2 are the same, and if they are the same return true because it means root2 exists which is a subtree of root. Then I return the Boolean true or false with a recursion call of subtree root.Left , root2 to see if there is a subtree in root.Left and then check if there is a subtree in root.Right. If one of these statements are true, this will return true due to the Boolean OR statement and if one of these are true, that means there is a subtree which is what I am checking for in this function.

Some things that could be improved with my submission is removing the irrelevant code which is not needed such as the count function, the postorder and preorder functions also to reduce the code complexity and improve efficiency.