Patrick Trahan

This is the output of the Binary Tree Problem 1

Text

Description automatically generated

This one took a while since my breadth first traversal was wrong. It took a while to fix but once it did everything else worked perfectly fine.

In this program the goal was to create a binary tree and have the tree be printed out with depth first traversal and breadth first traversal and check to see if a value is in the tree for both traversals as well. I used a binary search tree for this program because it was the easiest to work with. The Depth First Traversal had three separate methods, one for each of the different orders. The breadth first traversal only had one but needed to use a queue to loop through the tree. The methods to check if the value was in the tree or not were pretty much the same as printing out the trees. For the depth first search I used the pre order traversal for it because I felt it was the easiest to use for this case.