

# TREE PROJECT #4

**Lab Description :** Expand your binary search tree class. For this project, you will implement the following methods according to the descriptions in the slide deck:

**The four printing orders:** preOrder, postOrder, inOrder, revOrder

**Plus eight other methods:** getSmallest, getLargest, getNumLeaves, getNumLevels, getWidth, getNumNodes, isFullTree, isCompleteTree.

## Sample Output :

IN ORDER

70 80 85 90 98 100

PRE ORDER

90 80 70 85 100 98

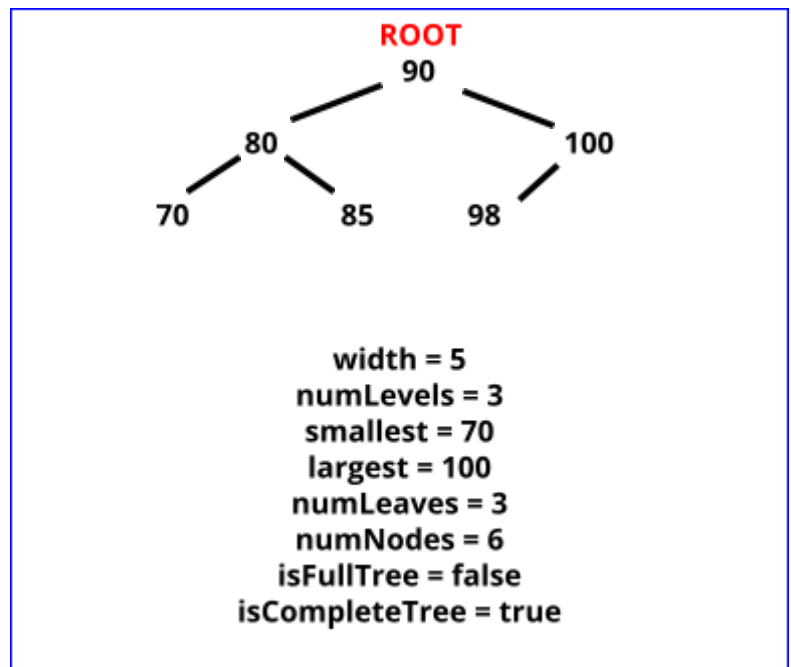
POST ORDER

70 85 80 98 100 90

REVERSE ORDER

100 98 90 85 80 70

Tree width is 5  
Number of levels is 3  
Smallest is 70  
Largest is 100  
Number of leaves is 3  
Number of nodes is 6  
The tree is not full.  
The tree is complete



*You may use the numbers in the box above to serve as one of your tester trees, as well as the tree shown in the slides for another tester.*

**Extensions for this project will be given on a future day.**