SEARCH TREES– INTERESTING PROBLEMS

ACKNOWLEDGEMENT: THESE SLIDES ARE ADAPTED FROM SLIDES PROVIDED WITH DATA STRUCTURES AND ALGORITHMS IN C++, GOODRICH, TAMASSIA AND MOUNT (WILEY 2004) AND SLIDES FROM NANCY M. AMATO AND JORY DENNY
Given a Binary Search Tree find the kth largest element in the BST with single traversal and without using any extra space.
Construct a BST from inorder and preorder traversal string. Write code for it.
Given a self-balancing tree (AVL), code a method that returns the median.

(Median: the numerical value separating the higher half of a data sample from the lower half. Example: if the series is 2, 7, 4, 9, 1, 5, 8, 3, 6 then the median is 5.)