

Exercise sheet 8

Exercise 18:

Write pseudocode for an $O(n)$ -time *recursive* procedure that, given an n -node binary tree, prints out the key of each node in the tree.

Exercise 19:

Write pseudocode for an $O(n)$ -time *nonrecursive* procedure that, given an n -node binary tree, prints out the key of each node in the tree in the same order as in Exercise 18. Use a stack as an auxiliary data structure.

Exercise 25:

For the set of keys $\{0, 5, 8, 18, 22, 25\}$ draw binary search trees of height 2, 3, 4, and 5 .