

Lab 4

Binary Search Trees.

Write code for the following methods of binary search trees.

(1) SEARCH(x, k) (recursion and iterative version); (20%)

(2) MINIMUM(x) and MAXIMUM(x); (10%)

(3) SUCCESSOR(x) and PREDECESSOR(x); (30%)

(4) INSERT(T, z); (20%)

(5) DELETE(T, z). (30%)

Note. T points the root of a binary search tree, x points any node in a binary search tree, and k denotes a key.