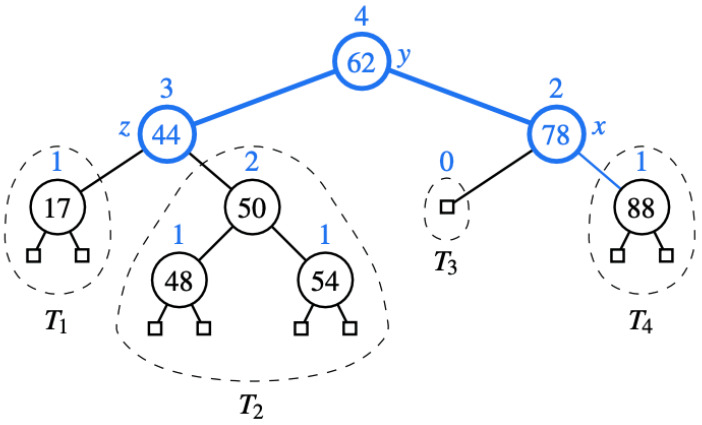
Recitation 10

Practice Problems

R-11.8 Draw the AVL tree resulting from the insertion of an entry with key 52 into the AVL tree of Figure 11.13b.



Insert 85, 46 into the tree

R-11.5 Dr. Amongus claims that the order in which a fixed set of entries is inserted into an AVL tree does not matter—the same AVL tree results every time. Give a small example that proves he is wrong.

R-11.9 Draw the AVL tree resulting from the removal of the entry with key 62 from the AVL tree of Figure 11.13b.

C-11.29 Explain how to use an AVL tree or a red-black tree to sort n comparable elements in $O(n \log n)$ time in the worst case.

Insert the following sequence to an empty AVL tree

- 88, 89, 84, 75, 30, 4, 64, 39, 5, 13
- 2, 4, 1, 3, 5, 6, 7