

4. Create a binary search tree using the following data entered as a sequential set:

80 70 66 56 33 23 14 10 7

10. The binary search tree in Figure 7-19 was created by starting with a null tree and entering data from the keyboard. In what sequence were the data entered? If there is more than one possible sequence, identify the alternatives.

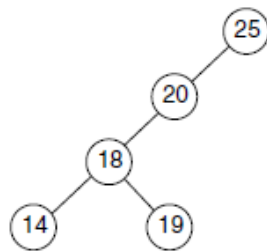


Figure for Exercise 10

14. Delete the node containing 85 from the binary search tree in Figure 7-22.

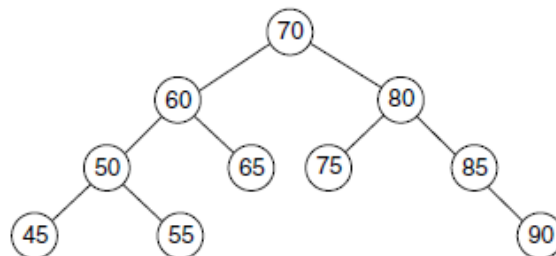


Figure for Exercises 13 and 14

16. Develop a nonrecursive algorithm for Algorithm 7-3, "Search BST."
22. Write a program that reads a list of names and telephone numbers from a text file and inserts them into a BST tree. Once the tree has been built, present the user with a menu that allows him or her to search the list for a specified name, insert a new name, delete an existing name, or print the entire phone list. At the end of the job, write the data in the list back to the file. Test your program with at least 10 names.

24. Write a program that processes a threaded binary tree. The program should first build the tree, then use an iterative traversal to process it using the threads.