

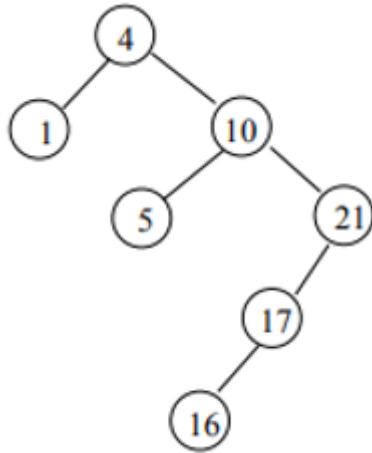
Training Problems #5**Chapter 7:**

1. Illustrate the operation of PARTITION on the array $A = \langle 13, 19, 9, 5, 12, 8, 7, 4, 21, 2, 6, 11 \rangle$. Show how the array would look like, step by step. You can assume array index starts at 1
2. After running PARTITION on Problem #1, what value does the PARTITION method return? Assume array index starts at 1.

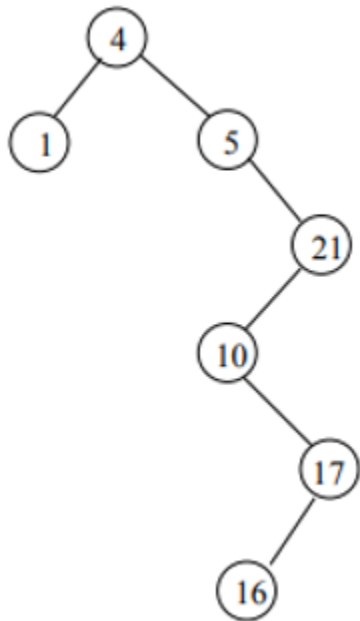
Chapter 12:

For questions 3 to 8, provide the resultant tree and explain what you did.

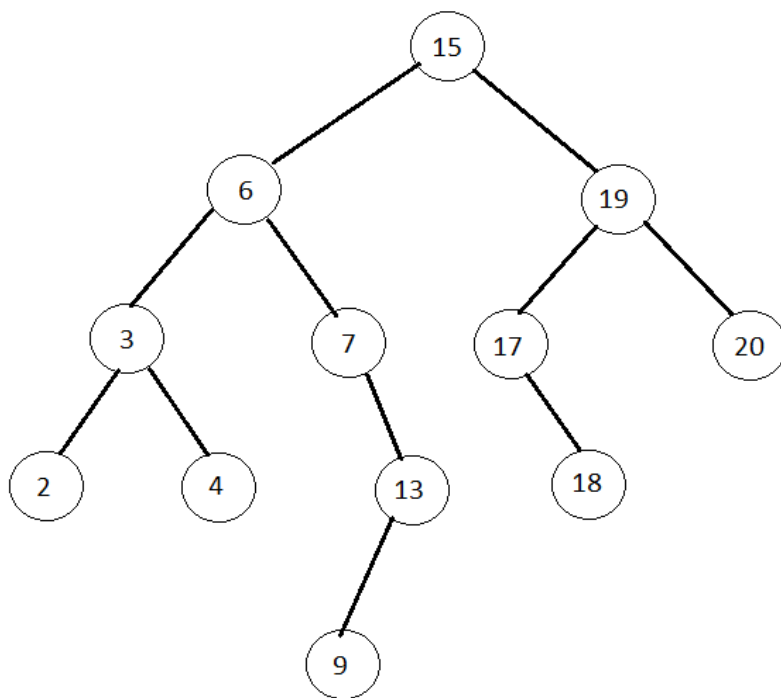
3. Delete node 21 from the below tree:



4. Delete node 4 from the below tree:



5. Delete node 15 from the below tree.
 6. Then delete node 6 from the tree.
 7. Then delete node 2 from the tree.



8. Provide the In Order, Pre Order, and Post Order traversal of the above tree (without the deletions).