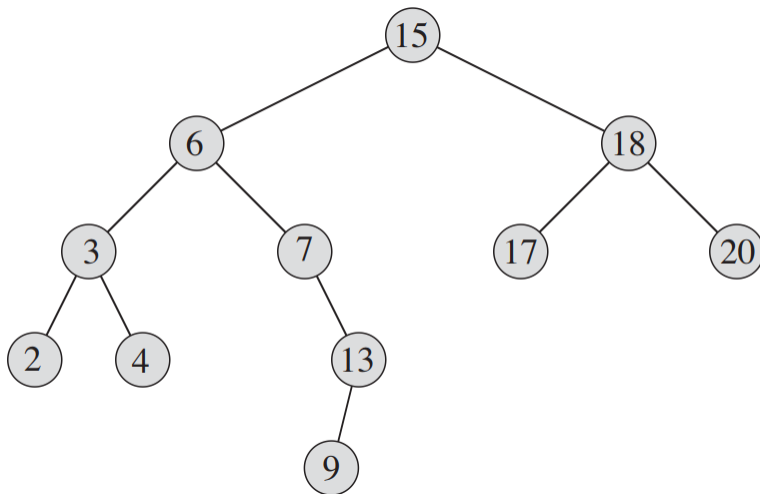


Group Problem Set #4

1. A d-ary heap is like a binary heap, but (with one possible exception) non-leaf nodes have d children instead of 2 children.
 - a. How would you represent a d-ary heap in an array?
 - b. What is the height of a d-ary heap of n elements in terms of n and d ?
2. Using Big-O notation, not including storage of the tree itself, how much additional memory storage is needed to implement
 - a. Breadth-First Search?
 - b. Depth-First Search?
3. Given the following BST:



- a. Insert a node with the value 14
- b. Insert a node with the value 17.5
- b. Show the steps required to delete the root, node 15