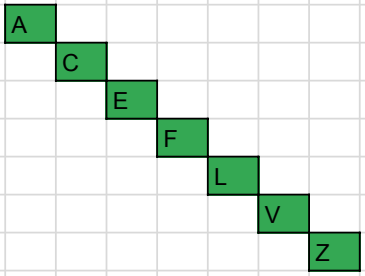
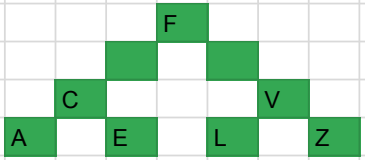
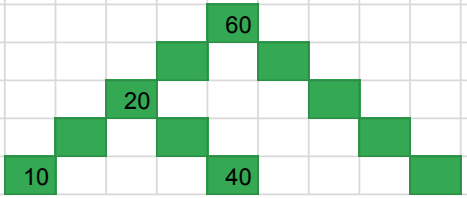
Problem		
1a	Which node must contain the inorder successor of the value in the root? Explain	
	6 is the inorder successor	The inorder successor of N 's entry is in the leftmost node in N's right subtree
1b	Which node must contain the inorder predecessor of the value in the root? Explain	
	8 is the inorder predecessor	the max value from node 2 is the right most node
2	Arrange nodes that contain the letters A , C , E , F , L , V , and Z into two binary search trees: one that has maximum	
	height and one that has minimum height.	
	max heght	

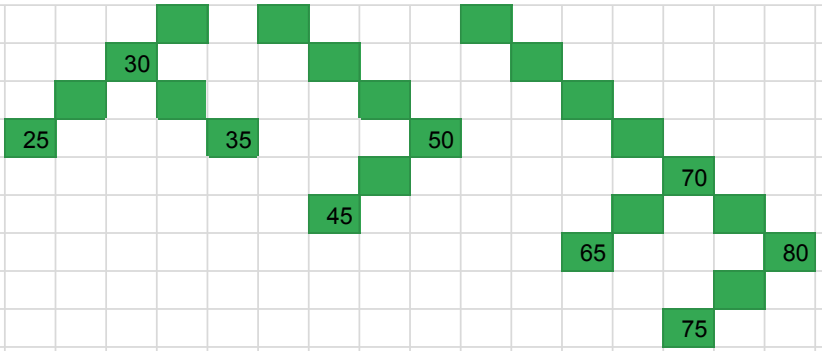


	min height	

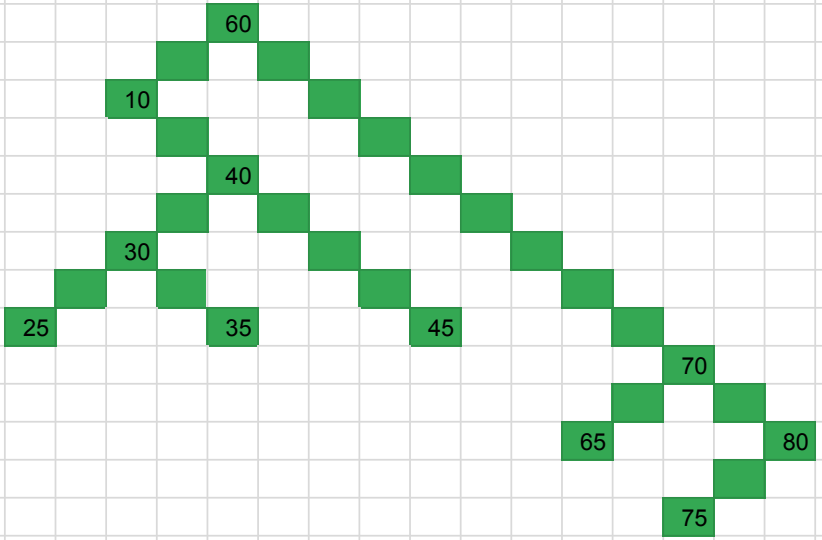


	Consider the binary search tree in Figure 15-18 of Chapter 15	
3a	What tree results after you insert the entries 80, 65, 75, 45, 35, and 25, in that order?	

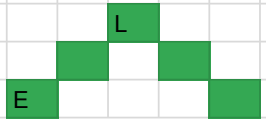


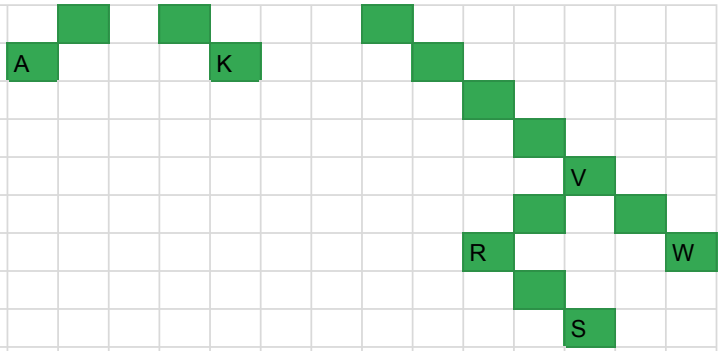


3b After inserting the nodes mentioned in part a , what tree results when you remove the entries 50 and 20?



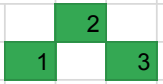
4 Consider the binary search tree in Figure 15-19 of Chapter 15 . What does the tree look like after you remove M , D , G , and T , in that order?





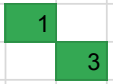
5 If you remove an item from a binary search tree and then insert it back into the tree, will you ever change the shape of the tree?

original



shape changes, see simple example

remove 2



add 2