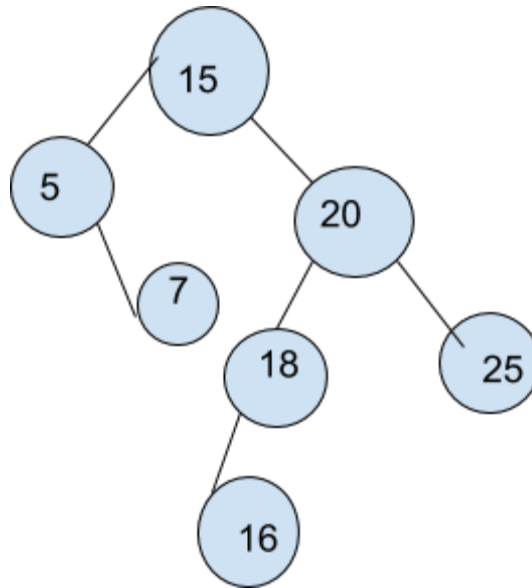


5.13)

- a) Overhead fraction = bytes of pointers/ total bytes, so  $12/16 = .75$  .
- b)  $8 / 24 = .33$
- c)  $(4 + 12 \text{ pointer bytes}) / (12 + 20 \text{ pointer bytes}) = .5$
- d)  $(8 \text{ pointer bytes}) / (8 + 8 \text{ pointer bytes}) = .5$

5.14) It would cause an issue with the transversal of the tree, since inorder traversal prints the tree from left->root->right.

5.15) a)

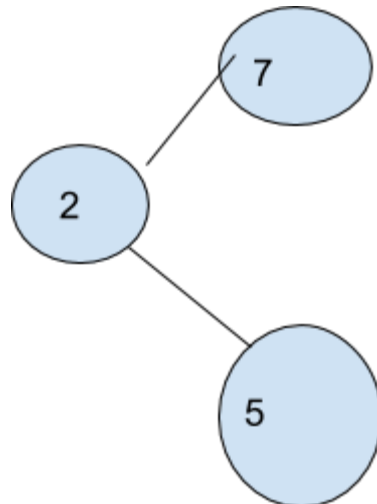


b) preorder: 15 5 7 20 18 16 25

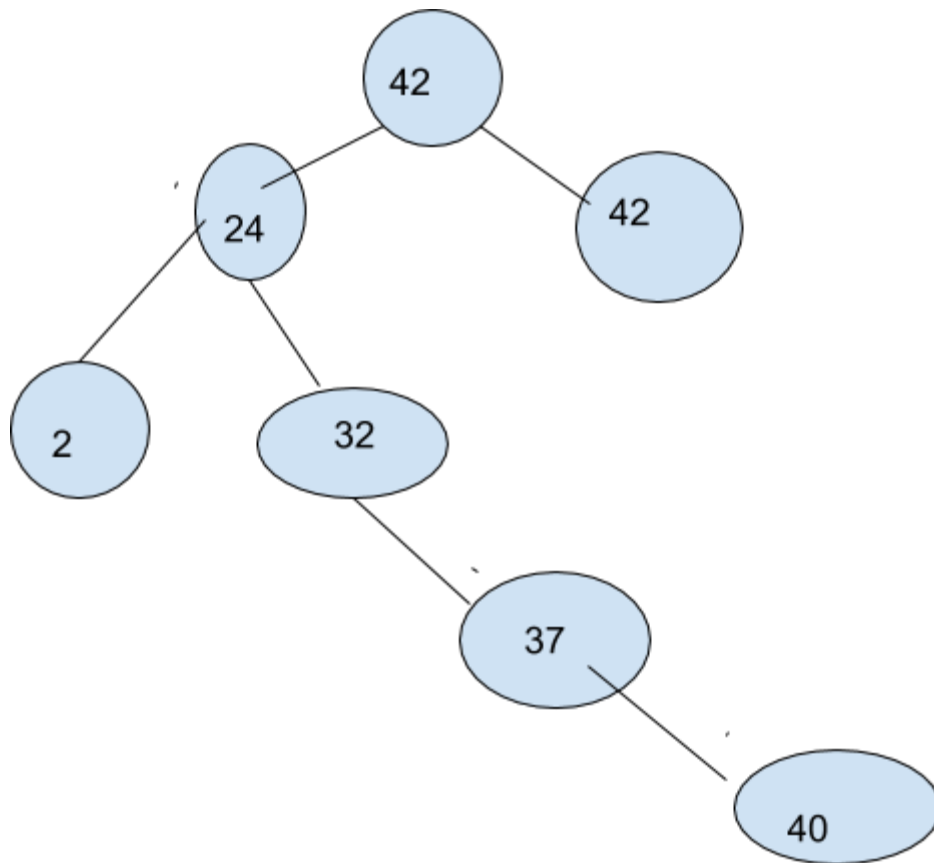
Inorder: 5 7 15 16 18 20 25

Postorder: 7 5 16 18 25 20 15

5.16 ) This is the segment where 5 would be inserted starting at the node 7 from the given figure.



5.17) I will show the segment starting with the node 42.



5.18)

```
Public static Node Descending(Node n){  
    if (n == null) return ;  
    Descending(n.right);  
    System.out.print(n.data + " ");  
    Descending(n.left);  
}
```