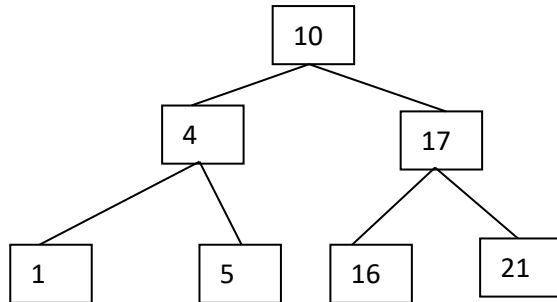


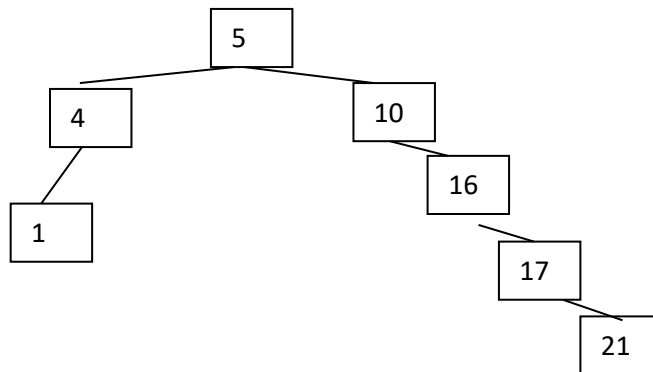
## Lab 3. Solution

### Question 1:

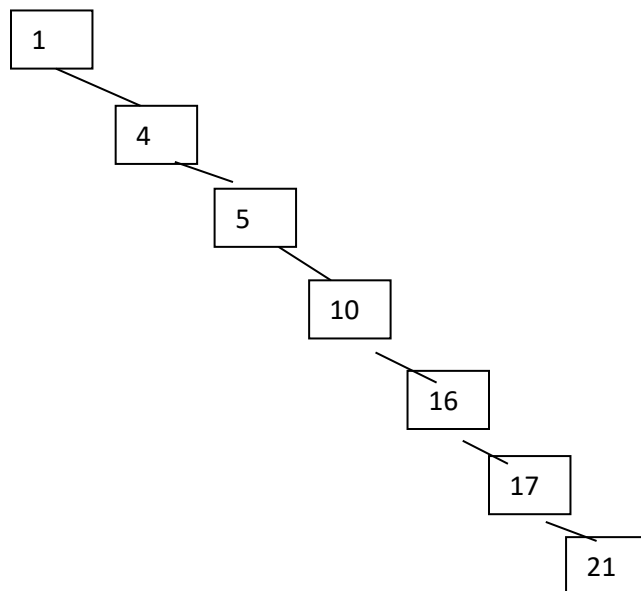
Binary search tree of height 2



Binary search tree of height 4



Binary search tree of height 6



### Question 2:

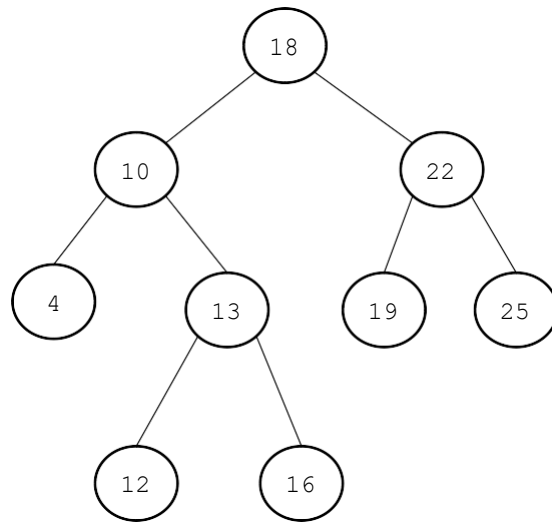
The sequences which could *not* be the sequence of nodes examined are:

c

### Question 3

Using the tree in figure 1

1. Draw the tree after doing a single left rotation of node 10 and 13. **Answer in fig. 2**
2. Draw the tree after doing a double rotation: left rotate node 10 and 13, then right rotate 13 and 18.  
**Answer after first rotation in fig. 2, and after second rotation in fig. 3**



Tree 1: Original Tree

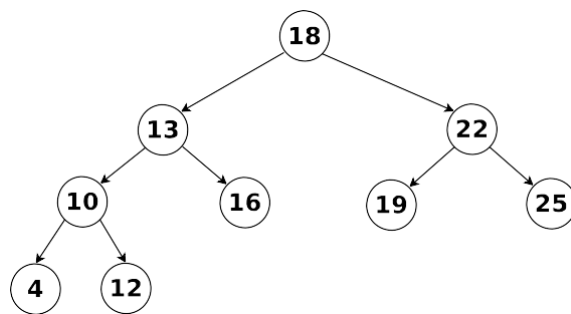


Fig 2: Question 3

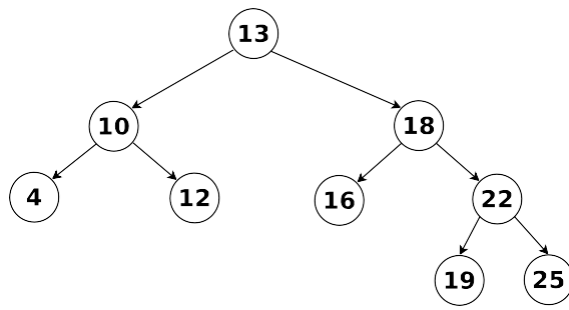


Fig 3: Question 3

