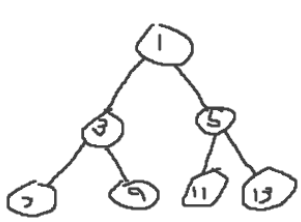
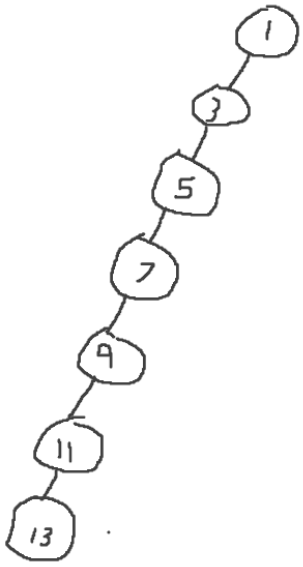
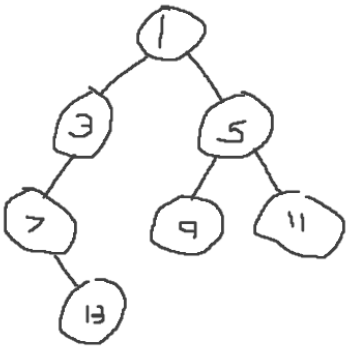
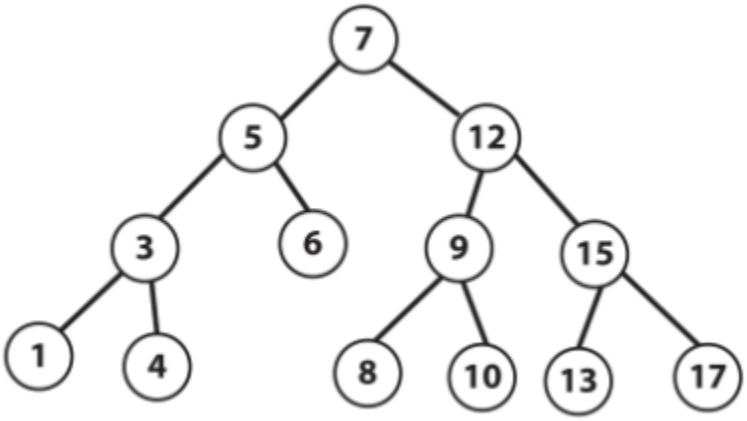
1.







2.



1, 4, 3, 6, 5, 8, 10, 9, 13, 17, 15, 12, 7

3.

non-recursive:

Create empty queue and push root node
While queue is not empty
    Pop node from queue
    If queue is not empty
        Increment counter by 1
    Endif
    Push right child node to queue
    Push left child node to queue

Recursive:

```
Function getNodeCount(root)
        If root is null
                Return 0
        Else
                Count is zero
                If right child node is not null OR left child node is not null
                        Count is one
                Endif
                Return count + getNodeCount(right child node) + getNodeCount(left child node)
        Endif
End function
```

4.

```
Function printSearchTree(root, a, b)
        If root is null
                Return
        If root value is greater than a
                printSearchTree(left child node)
        If root value is greater than or equal to a and root value is less than or equal to b
                Print root value
        If root value is less than b
                printSearchTree(right child node)=
`       endif
End function
```

5.

```
Function sameTree(root1,root2)
        If root1 is null or root2 is null
                Return 1
        If root 1 value equals root 2 value
                If sameTree(root1 left child, root2 left child) == 1
                        If sameTree(root1 right child, root2 right child) == 1
                                Return 1
                        Endif
                Endif
        endif
        Return 0
End function
```