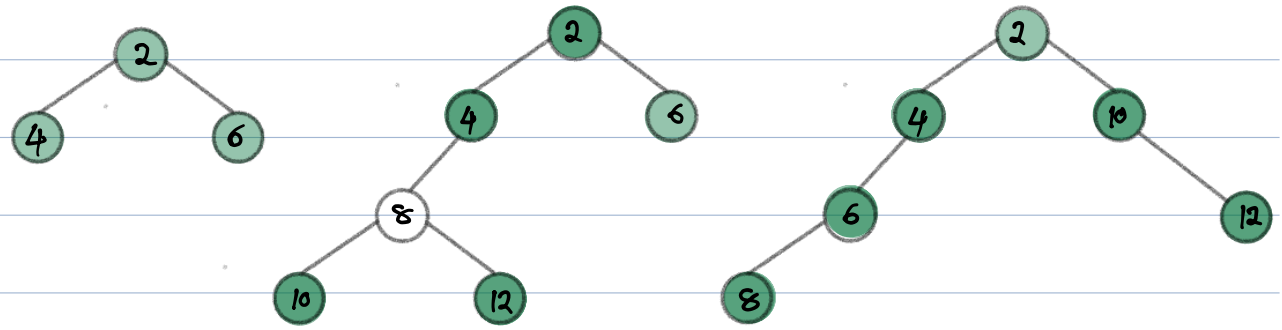
Binary Tree

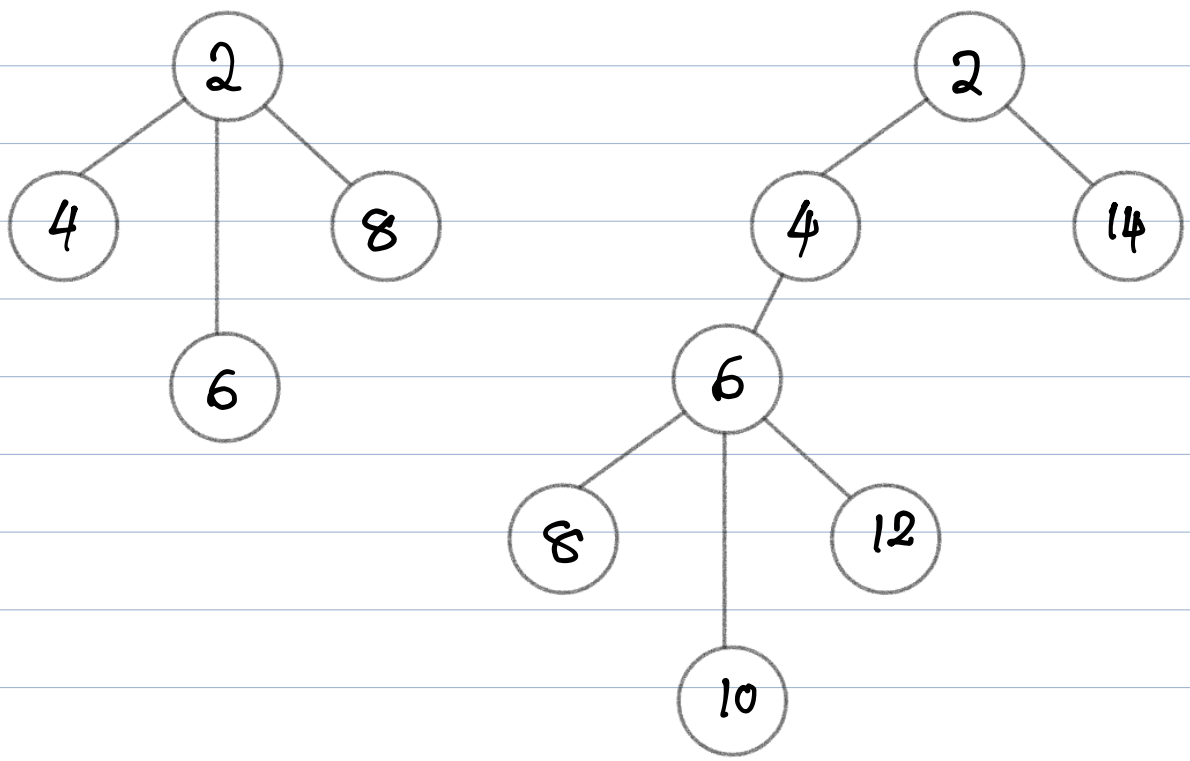
A Tree that can have two children at most

It can have zero child, e child or at most two children.

Examples of Binary Tree



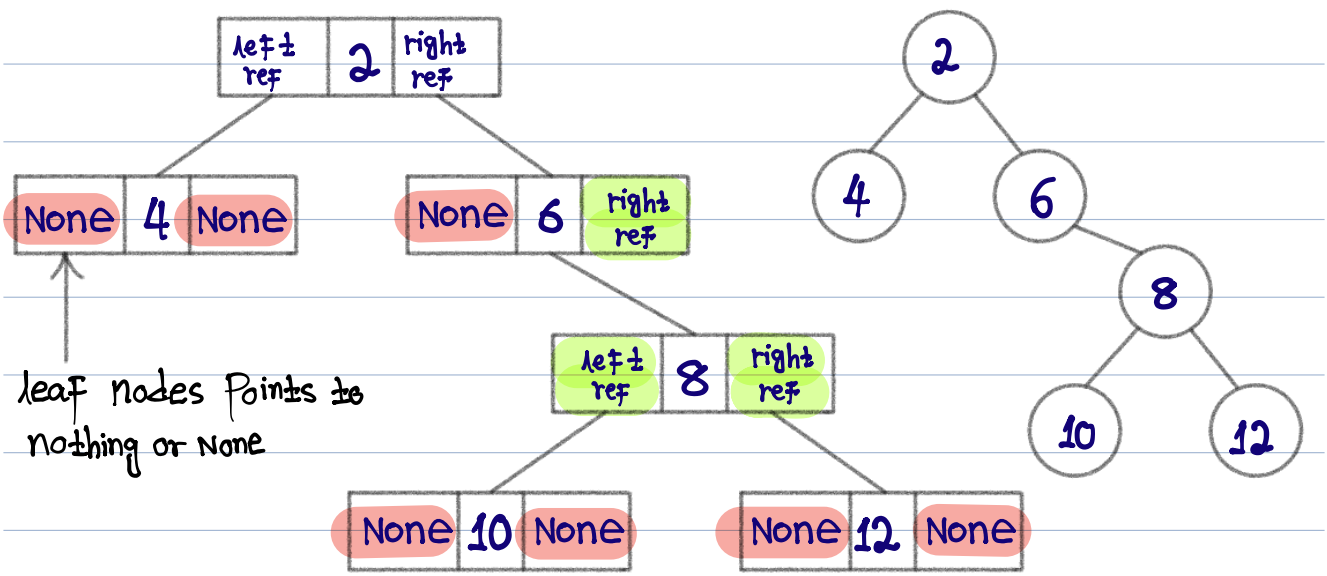
Examples Non-Binary Tree



Binary Tree Implementation: It is mainly implemented either using a linked list or an array.

Using Linked list: Every node in a tree is having three fields, one to keep the reference of the left child, another one to keep the reference of right child, and one field to keep the value of current node.

Left child reference	current value	Right child reference



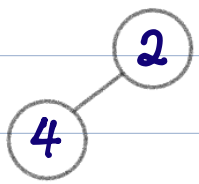
Python Implementation:

Template to build a node

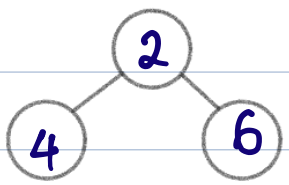
```
Class Node:
    def __init__(self, data):
        self.data = data
        self.right = None
        self.left = None
```

```
root = Node(2)
```

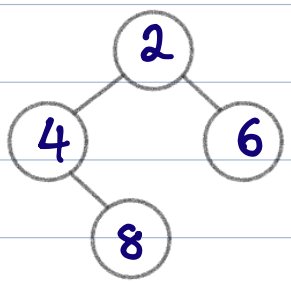

```
root.left = Node(4)
```




```
root.right = Node(6)
```




```
root.left.right = Node(8)
```




```
root.left.left = Node(10)
```