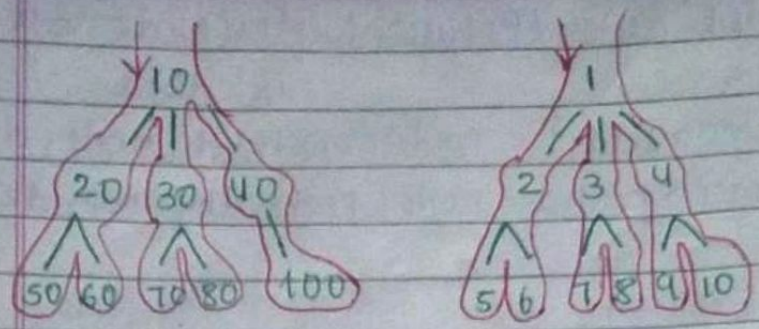
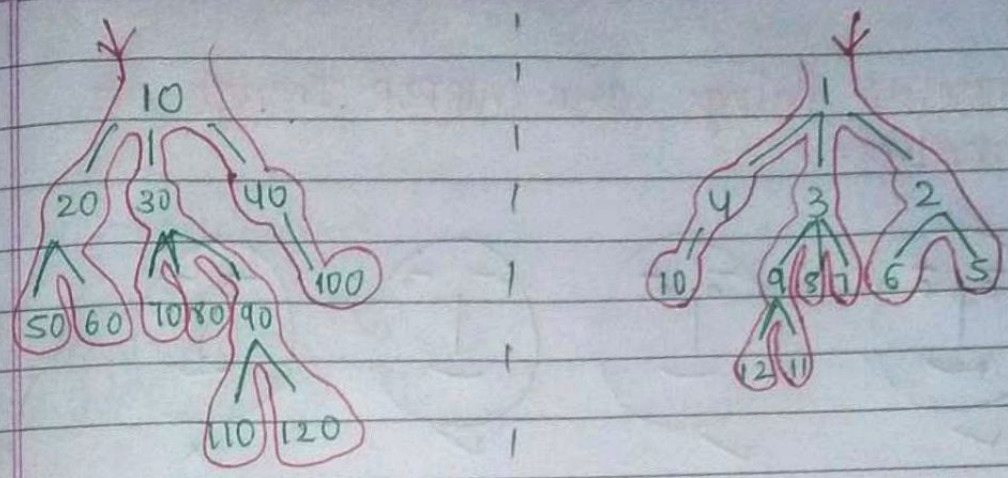
10-JAN-22

1. Are Trees Similar In Shape:-




```
public static boolean areSimilar(Node n1, Node n2){

    if(n1.children.size() != n2.children.size()){
       return false;
    }

    for(int i=0; i< n1.children.size(); i++){
        Node c1 = n1.children.get(i);
        Node c2 = n2.children.get(i);

        If(areSimilar(c1,c2) == false){
          return false;
        }
    }
    return true;
}
```

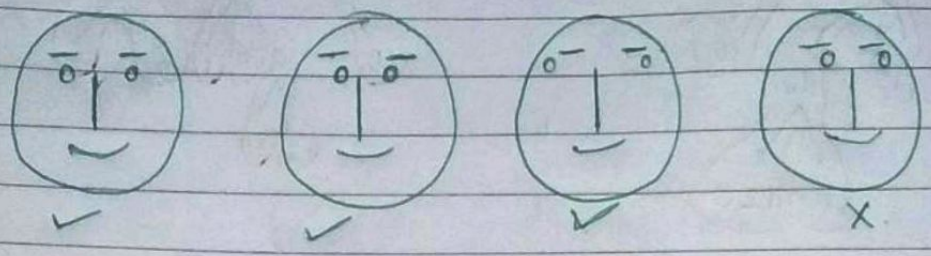
2. Are Trees Mirror In Shape -



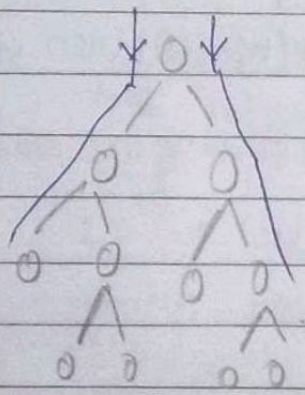

```
public static boolean areMirror(Node n1, Node n2){

    if(n1.children.size() != n2.children.size()){
        return false;
    }

    for(int i=0; i< n1.children.size(); i++){
        Node c1 = n1.children.get(i);
        Node c2 = n2.children.get(n2.children.size()-1-i);

        if(areMirror(c1, c2) == false){
            return false;
        }
    }
    return true;
}
```

3. Is Generic Tree Symmetric -

→ Symmetric things are MIRROR Image of Themselves.

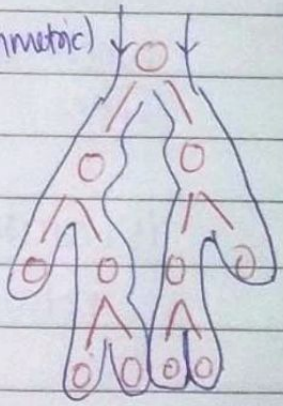



```
public static boolean areMirror(Node n1, Node n2){
        //Mirror code.
}

public static boolean isSymmetric(Node node){
        return areMirror(node, node);
}
```



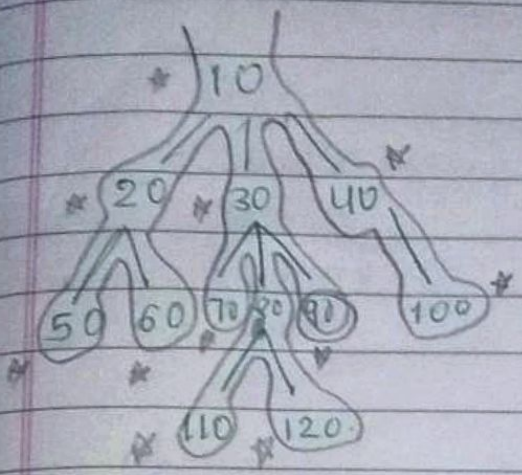
(Not symmetric)

(Symmetric)



Is similar ke liye 2 Tree
Is symmetric for 1 Tree
AreMirror me 2 Tree.

4. Predecessor And Successor of An Element.



Preorder.

90 Predecessor = 120

90 successor = 40.

10 pred = null

10 succ = 20

100 pred = 40

100 succ = null.

[Reverse Data Recursive - Reverse (left heap / right heap)

is Palin

Add