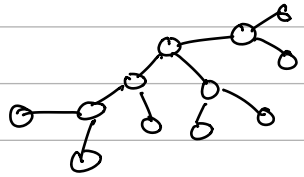
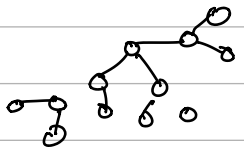
Minimum Score after Removal on a Tree:



→ remove any 2 edges

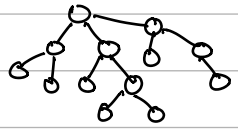


3 SubTree → min(max(S_1, S_2, S_3) − min(S_1, S_2, S_3))

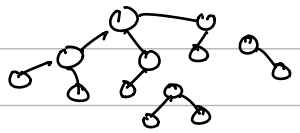
$S_1 S_2 S_3$ are XOR of subTrees.

Concepts: ① Storee XOR of SubTree.

② Give all the node an ID and find in O(1) if id1 is ancestor of id2.

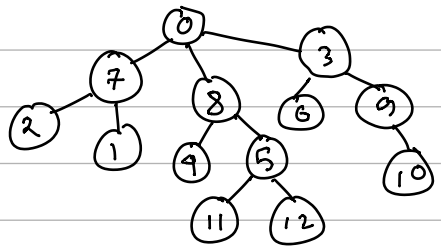


→ take any 2 node

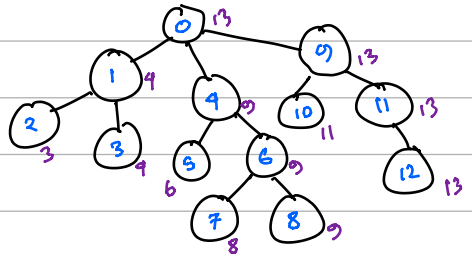


```
for(int i= 1 .. n)
    for( j= i+1 .. n)
```

i & j are Ids not the actual node number



→



id:	0	1	2	3	4	5	6	7	8	9	10	11	12
Rank:	13	4	3	4	9	6	9	8	9	13	11	13	13

if idy < rank[idx]; idy is subTree of idx.