

17th August 2021

1. Recover BST
2. Construct BST from level order
2. Serialise and Deserialise N-ary Tree
4. Serialise and Deserialise Binary Tree
5. Left View of Binary Tree
6. Right View of Binary Tree

19th August 2021

1. width of shadow of Binary Tree
2. Vertical order traversal of B-Tree
2. vertical order traversal of B-Tree - II
4. Bottom View of a Binary Tree
5. Top View of a Binary Tree

21st August 2021 (Morning)

2. Diagonal order of a Binary Tree \Rightarrow
2. Diagonal order of a Binary Tree (Anti-clockwise)
2. Vertical order sum of B-Tree $\parallel \rightarrow \text{Sum}$
4. Diagonal order sum of B-Tree $\parallel \rightarrow \text{Sum}$
5. Node to root path in B-Tree

21st August 2021 (Evening)

1. Iterator \rightarrow Generic Tree from LL
 \rightarrow BST Iterator - 2.
2. Inorder Morris Traversal
3. Pre Order Morris Traversal
4. Post order Morris Traversal

24th August 2021

1. Root to all leaf path in B.T.
2. All single child in B.T.
3. Count of single child parent
4. All nodes distance K in B.T.
5. Burning Tree

26th August 2021

1. Burning Tree 2
2. max-width of Binary Tree
3. Convert BST to Doubly LL
4. Convert Sorted DLL to BST
5. Path sum in Binary Tree

28th August 2021 (Morning)

1. Path sum in Binary Tree 2
2. Diameter of Binary Tree (All methods)
3. Maximum path sum in B/w two leaf
4. Miscellaneous

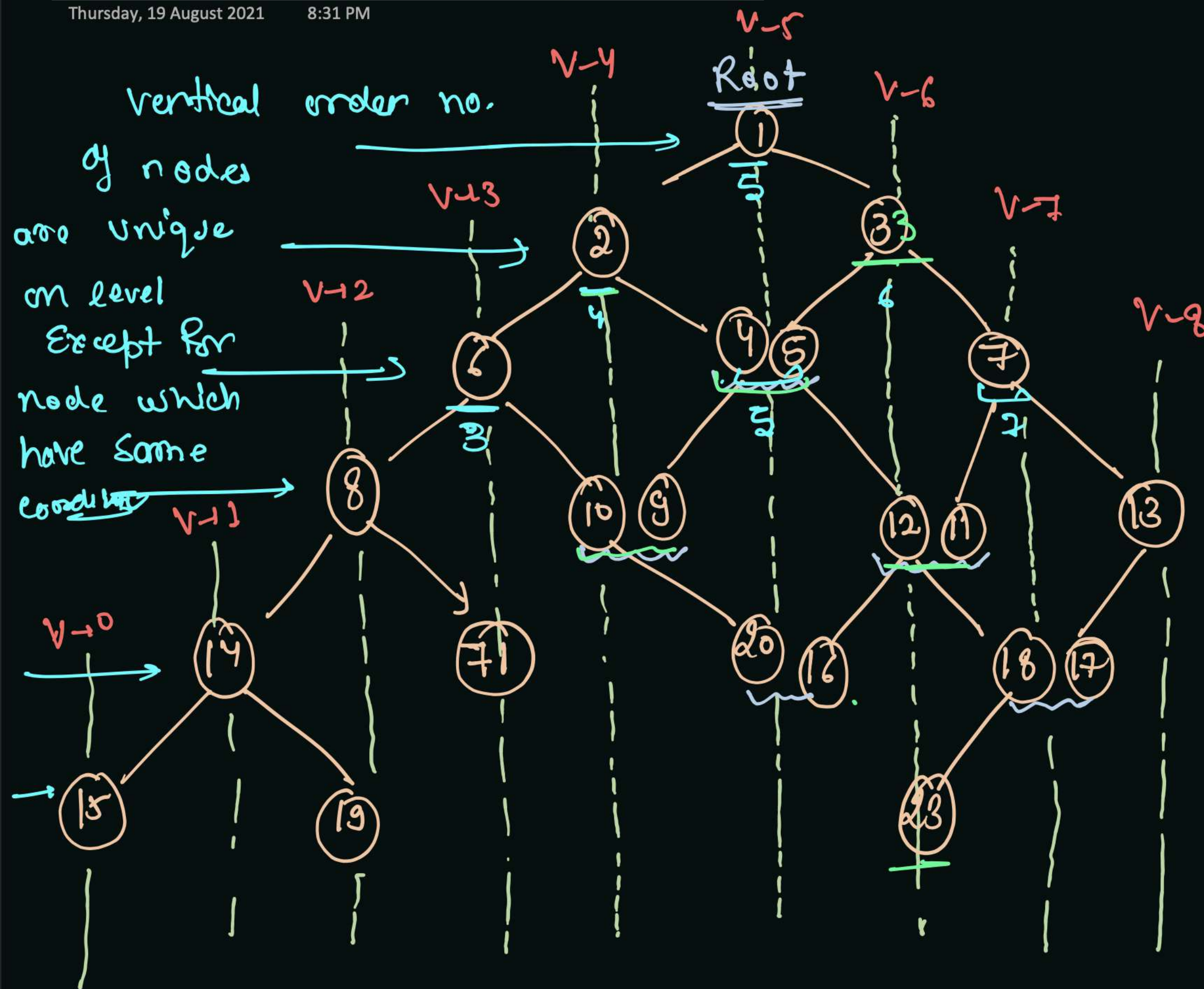
28th August 2021 (Evening)

1. Maximum path sum of B-Tree
2. Path sum Equal to given value
3. Lowest common ancestor of B-Tree
4. Miscellaneous

Vertical Order Traversal Of Binary Tree -II

Thursday, 19 August 2021

8:31 PM



width of tree = 9

V0 → 15

V1 → 14

V2 → 8, 19

V3 → 6, 7

V4 → 2, 9, 10

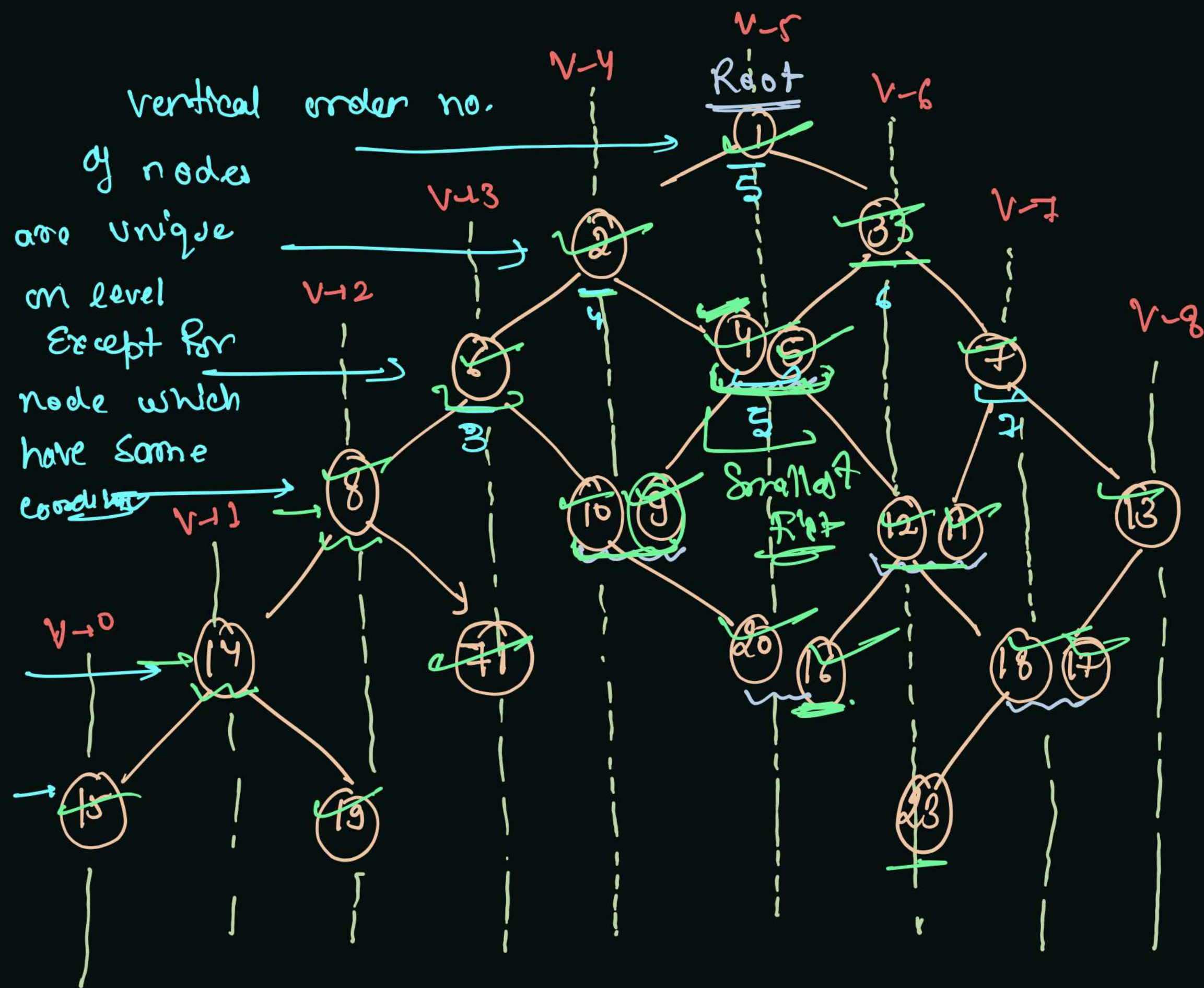
V5 → 1, 4, 5, 16, 20

V6 → 33, 11, 12, 23

V7 → 7, 17, 18

V8 → 13

NOTE: If more than one node have same coordinate then smaller will appear first.



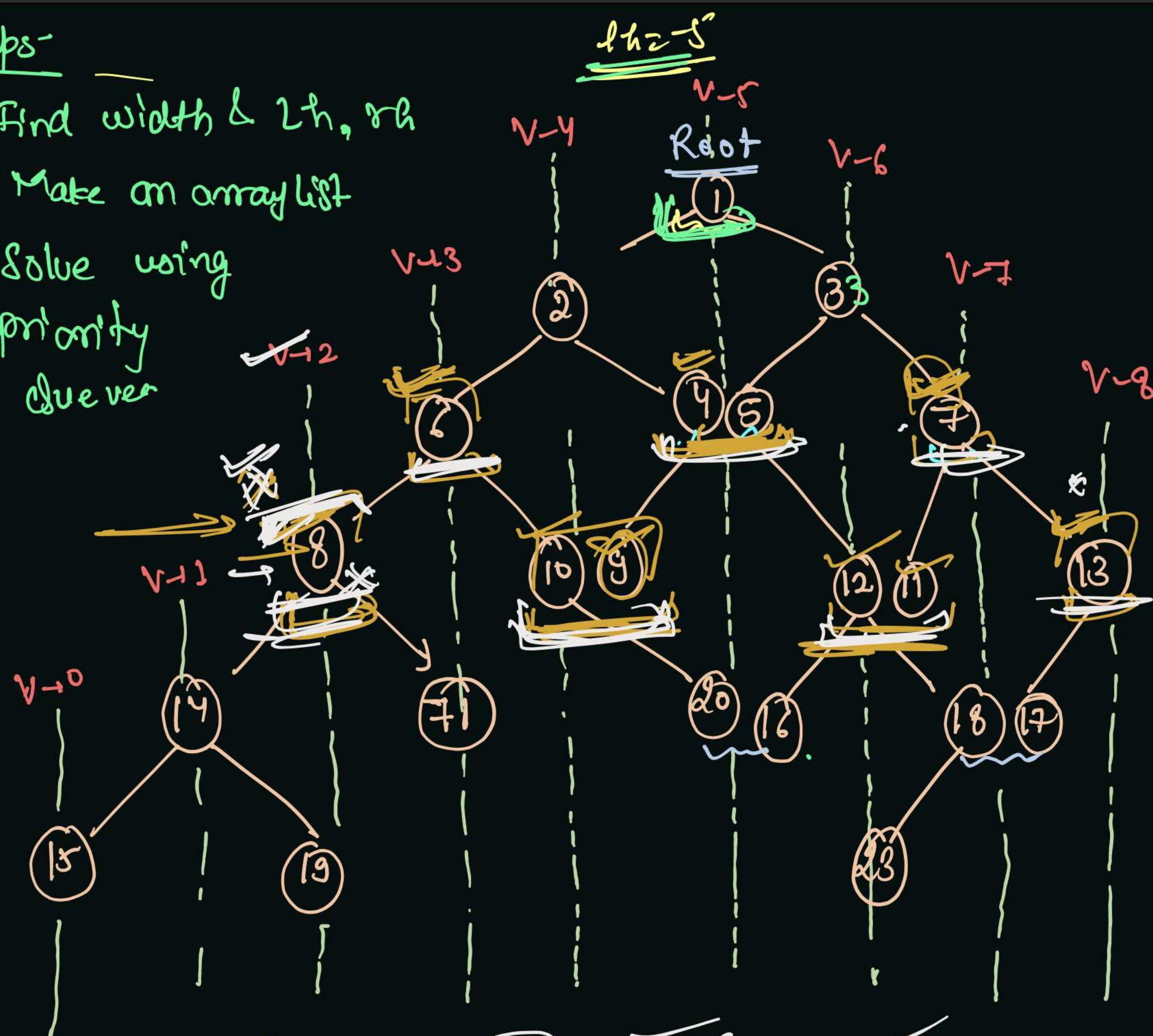
$v_0 \rightarrow 15$
 $v_1 \rightarrow 14$
 $v_2 \rightarrow 8, 19$
 $v_3 \rightarrow 6, 7, 1$
 $v_4 \rightarrow 2, 9, 10$
 $v_5 \rightarrow 1, 4, 5, 16, 20$
 $v_6 \rightarrow 33, 11, 12, 23$
 $v_7 \rightarrow 7, 17, 18$
 $v_8 \rightarrow 13$

- ① Fill vertical order
 ② Sort Every vertical order
 Some Test case for level maintenance

Remove priority queue

steps-

- ① Find width & Lh, rh
- ② Make an arraylist
- ③ Solve using priority queue



2 → 8
4 → 10, 9
6 → 12, 11

8 → 13

4 → 9, 10
6 → 11, 12

8 → 13

main

width

Priority Queue

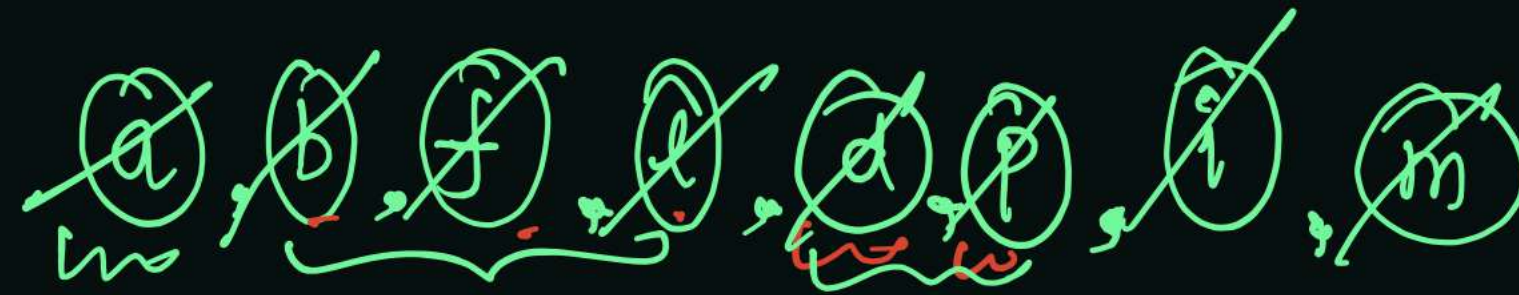
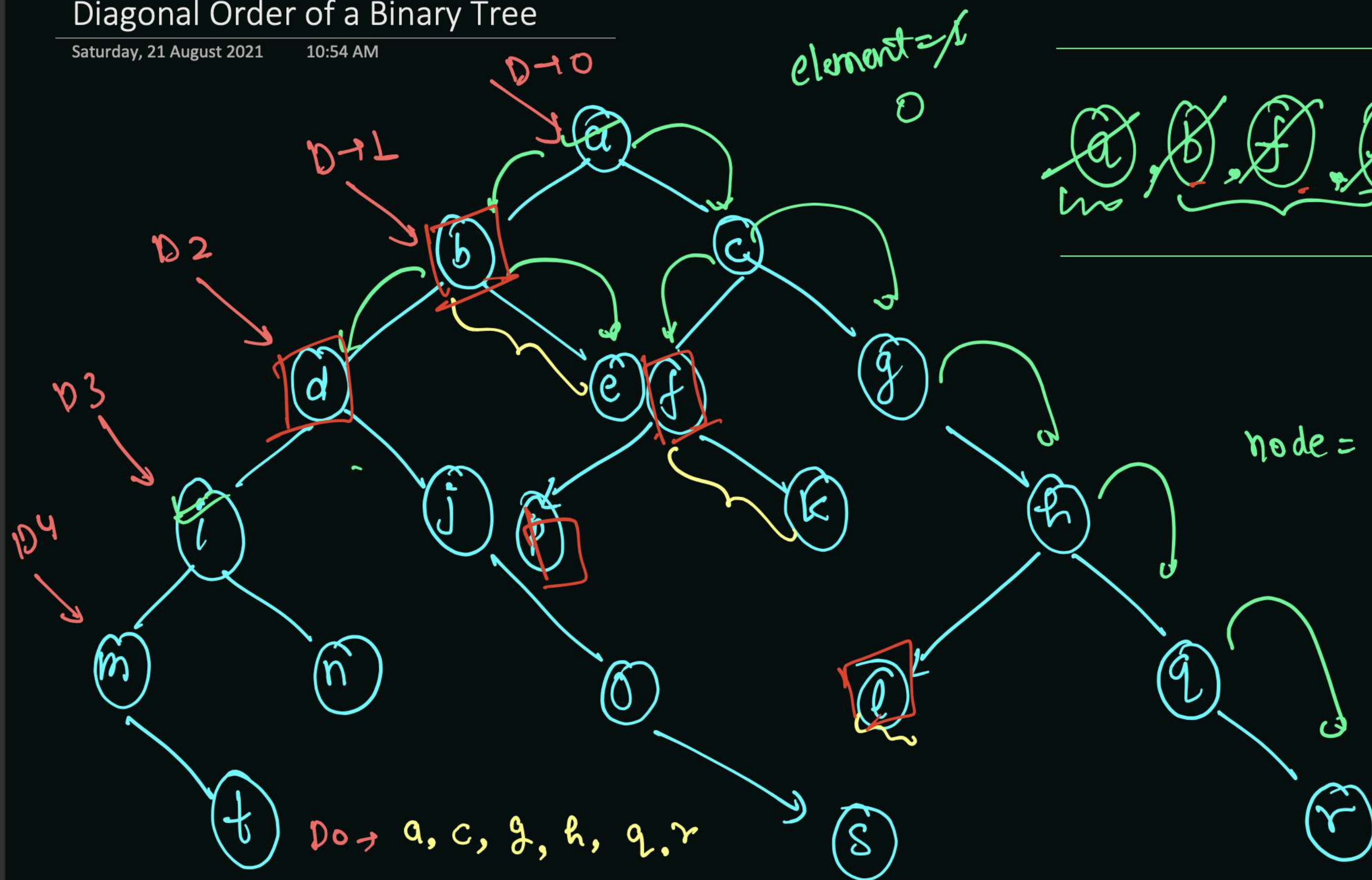
V0 → 15
V1 → 14
V2 → 8, 19
V3 → 6, 71
V4 → 2, 9, 10
V5 → 1, 4, 5, 16, 20
V6 → 33, 11, 12, 23
V7 → 7, 17, 18
V8 → 13

Priority Queue will make priority on the basis of node value

Diagonal Order of a Binary Tree

Saturday, 21 August 2021

10:54 AM



node = ~~not~~ null

$D_0 \rightarrow a, c, g, h, q, r$

$D_1 \rightarrow b, e, f, k, l$

$D_2 \rightarrow d, j, o, s, p$

$D_3 \rightarrow i, n$

$D_4 \rightarrow m, t$

$D_0 \rightarrow a, c, g, h, q, r$

$D_1 \rightarrow b, e, f, k, l$

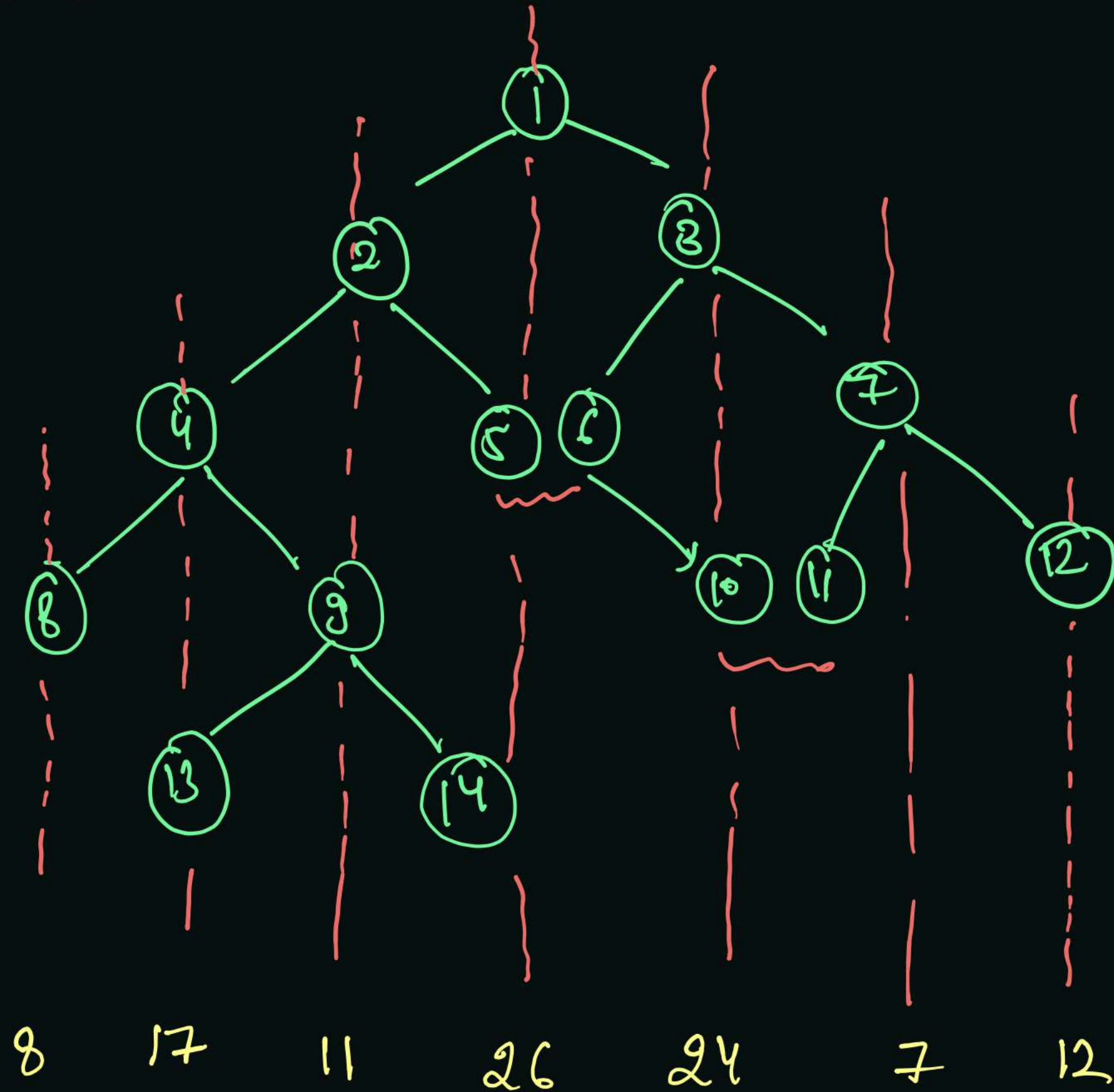
$D_2 \rightarrow d, j, o, s, p$

$D_3 \rightarrow i, n$

$D_4 \rightarrow m, t$

Vertical Order Sum And Diagonal Order Sum

Saturday, 21 August 2021 12:41 PM



Vertical order Sum

