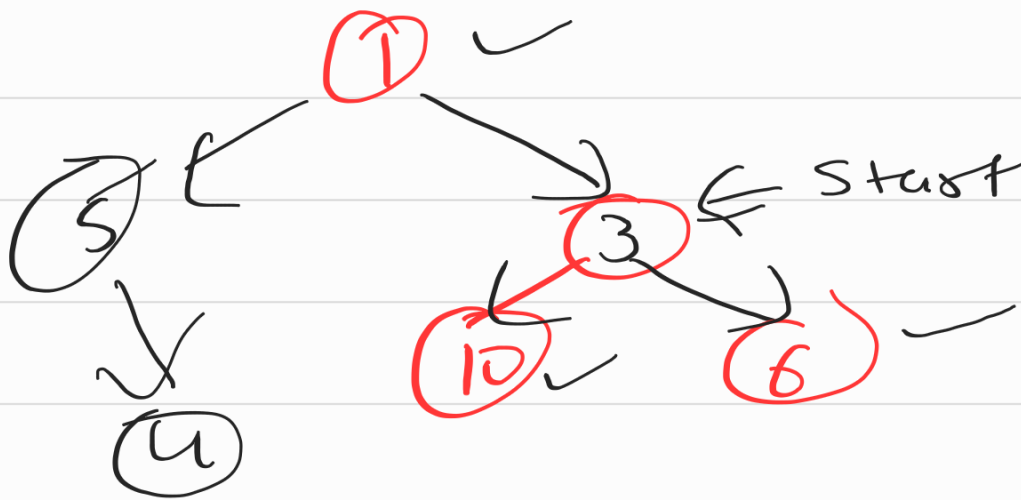


Amount of Time for Binary Tree to be infected



Intuition

1- How to traverse back

2- Level by level traversal (hi
ra hai bhai toh

BFS infection

3- Agr isi Tree ko undirected
bna dia jaye toh..

Graph ban jayega wo
bhi undirected

`unordered_map<int, vector<int>> adj;`

$1 \rightarrow 5, 3$
 $5 \rightarrow 1, 4$
 $4 \rightarrow 5, 2$
 $9 \rightarrow 4$
 $2 \rightarrow 4$

$3 \rightarrow 1, 10, 6$
 $10 \rightarrow 3$
 $6 \rightarrow 3$

Visited

3, 1, 10, 6, 5, 4

minute

$= \emptyset$ ~~12~~

3 se BFS start krenge

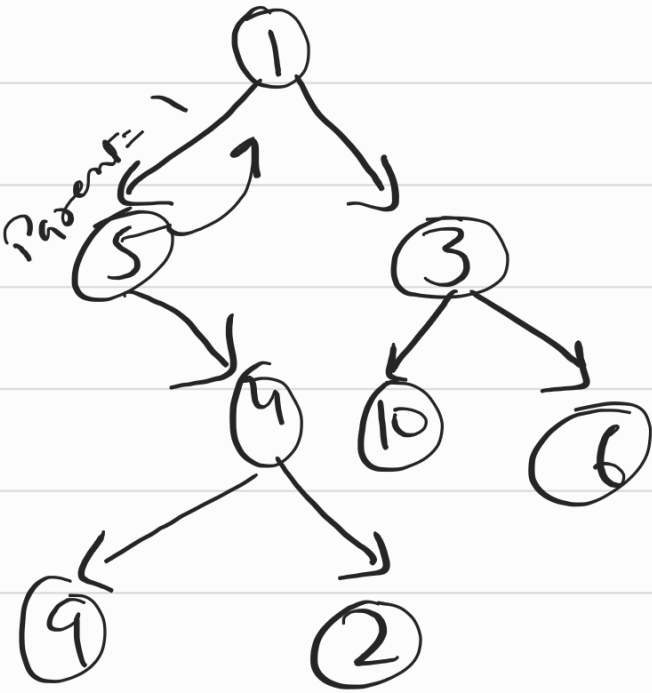
3 4 5

L1	L2	L3	L4	L5
3	1	10	6	5
		4	9/2	

minute
--;

Now, how did we formed Graph

root, Parent = -1



adj: \rightarrow
int \rightarrow vector<int>

1 \rightarrow 5, 3

5 \rightarrow 1, 4

4 \rightarrow 5

1

1

,

makegraph(adj, parent, Cur)

if (parent \neq -1) { // Cur ka parent

adj[Cur \rightarrow val]. push_back(parent)

if (Cur \rightarrow left)

adj[Cur \rightarrow val]. push_back(Cur \rightarrow left \rightarrow val)

if (Cur \rightarrow right)

adj[Cur \rightarrow val]. push_back(Cur \rightarrow right \rightarrow val);

makegraph(adj, Cross-ved, Cross-next)
makegraph(adj, Cross-ved, Cross-Right);

$O(n)$