

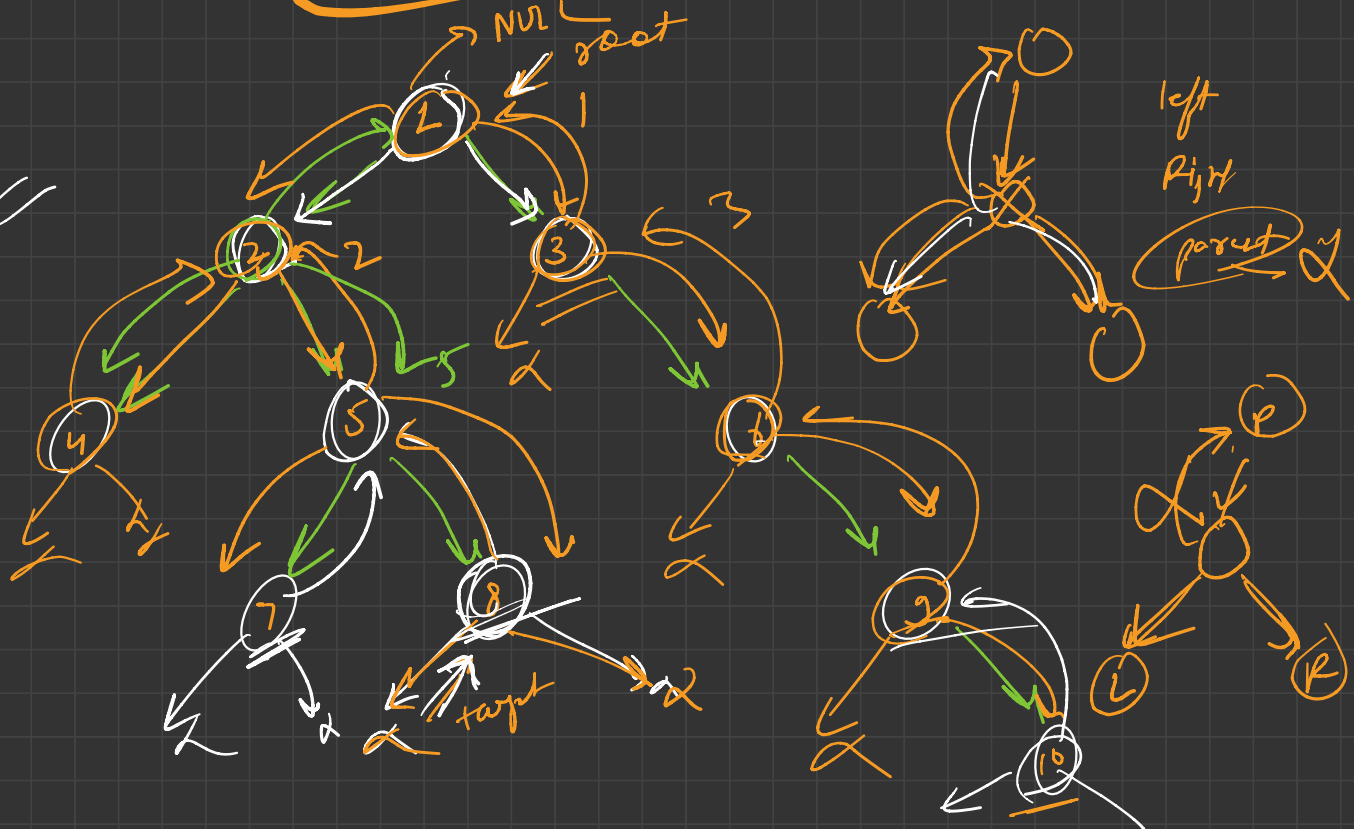

Trees

→ 2nd step

6 → 3	
5 → 2	
4 → 2	10 → 9
3 → 1	9 → 6
2 → 1	8 → 5
1 → N	7 → 5

map

$O(n)$



approach: -

Ist step

→ node To Parent mapping

map < Node *, Node * > node To Parent
mapping

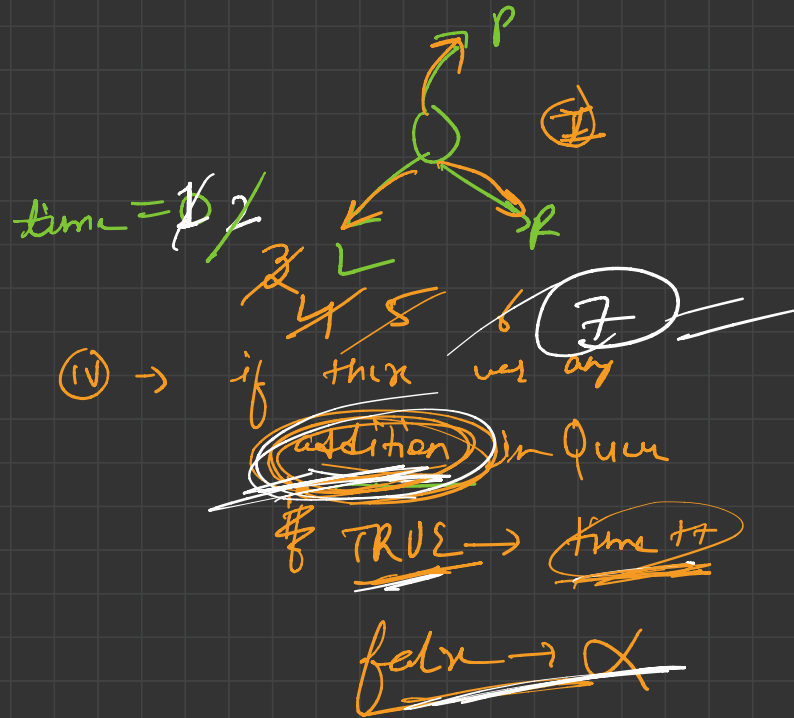
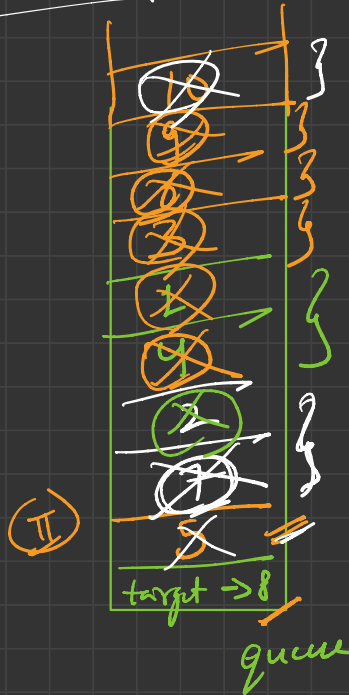
⇒ L.O.T

IInd step

→ find target Node

↳ O(H)

IIIrd step :-



map < Node * , bool >

vinited

$$T.C \rightarrow \underline{\underline{O(N)}} + O(N)$$

$$= \underline{\underline{O(N)}}$$

$$\underline{\underline{O(N \log 1)}}$$

$$\underline{S.C} \rightarrow O(N) + O(N) \\ \geq \underline{\underline{O(N)}}$$

