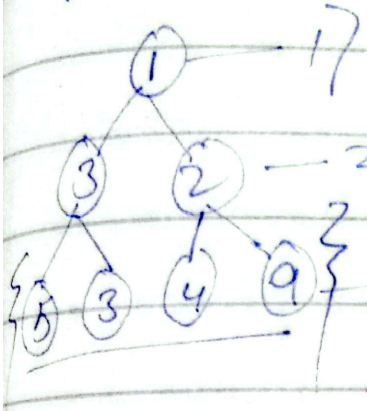
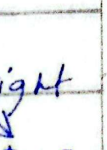
Maximum Width of Binary Tree

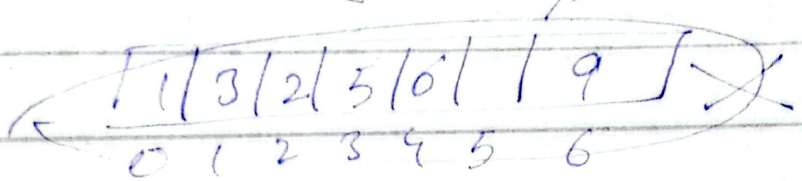
Longest length between the end nodes where the null nodes between the end nodes that would be present in a complete Binary Tree.



→ 2^0
→ 2^1
→ 2^2
→ 2^k (CBT Indexing)

* Traverse level wise
* BFS using Queue






```
int maxwid(root){
Queue<pair<Node*, int>> q
  q.push(root,0)                maxwidth=0
while(q.size()>0){
stIdx = q.front().second
endIdx = q.back().second
Maxwid = max(maxwid, endIdx - stIdx + 1)
  for(i=0 to currlevelsize){
  currNode = q.pop()
  if(left) ---> (node->left, 2*idx+1)
  if(right) ---> (node->right, 2*idx+2)
  }}
```

TC = O(n)