

199. Binary Tree Right Side View

Solved ✓

Medium Topics Companies

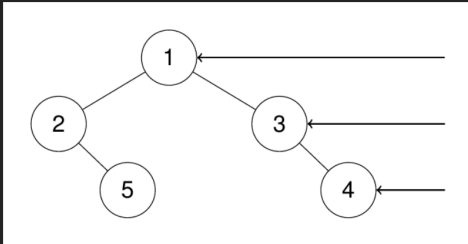
Given the `root` of a binary tree, imagine yourself standing on the **right side** of it, return the values of the nodes you can see ordered from top to bottom.

Example 1:

Input: `root = [1,2,3,null,5,null,4]`

Output: `[1,3,4]`

Explanation:



```
1 # Definition for a binary tree node.
2 # class TreeNode:
3 #     def __init__(self, val=0, left=None, right=None):
4 #         self.val = val
5 #         self.left = left
6 #         self.right = right
7 class Solution:
8     def rightSideView(self, root: Optional[TreeNode]) -> List[int]:
9         if not root:
10             return []
11
12         q = deque([root])
13         res = []
14
15         while q:
16             h = len(q)
17             for i in range(h):
18                 node = q.popleft()
19
20                 if i == h - 1:
21                     res.append(node.val)
22
23                 if node.left:
24                     q.append(node.left)
25
26                 if node.right:
27                     q.append(node.right)
28
29         return res
30
```

• BFS + height measurement.

- for i in $\text{range}(h)$:

iterate through each height.

if $i == h - 1$,

then it's the last node of this
height, AKA the right most.

- add child from left to right, make
sure the right most is always the tail.