Maximum Path Sum Binary Tree III

```
1 class Solution(object):
    def maxPathSum(self, root):
3
4
      input: TreeNode root
5
      return: int
6
7
      # write your solution here
8
      self.max = float('-inf')
9
       self.helper(root)
10
       return self.max
11
    def helper(self, root):
12
      if not root:
13
14
      return 0
      l = self.helper(root.left)
15
16
      r = self.helper(root.right)
       self.max = max(self.max, root.val, root.val + l, root.val + r)
17
       return max(root.val, root.val + l, root.val + r)
18
```