**Justin\_LinkedList\_0143.**  **Reorder List**

**Concept:**

先把所有 node 加到一個 list 裡

再用迴圈把 第一個接到最後一個 ==> 最後一個接到第二個 ==> .....

最後再把最後一個接到 None

**Code:**

# Definition for singly-linked list.

# class ListNode:

# def \_\_init\_\_(self, x):

# self.val = x

# self.next = None

class Solution:

def reorderList(self, head: ListNode) -> None:

"""

Do not return anything, modify head in-place instead.

"""

if head is None:

return head

temp\_list = []

temp\_list.append(None)

i = 1

while(head):

temp\_list.append(head)

head = head.next

for i in range(1,len(temp\_list) // 2):

temp\_list[i].next = temp\_list[-i]

temp\_list[-i].next = temp\_list[i + 1]

if (len(temp\_list) % 2) == 1:

temp\_list[(len(temp\_list) // 2) + 1].next = temp\_list[0]

else:

temp\_list[(len(temp\_list) // 2)].next = temp\_list[0]