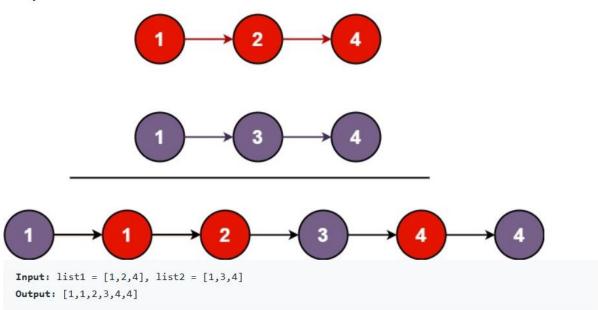
### 21. Merge Two Sorted Lists

You are given the heads of two sorted linked lists list1 and list2.

Merge the two lists in a one **sorted** list. The list should be made by splicing together the nodes of the first two lists.

Return the head of the merged linked list.

## Example 1:



#### Example 2:

```
Input: list1 = [], list2 = []
Output: []
```

# Example 3:

```
Input: list1 = [], list2 = [0]
Output: [0]
```

#### Constraints:

- The number of nodes in both lists is in the range [0, 50].
- -100 <= Node.val <= 100
- Both list1 and list2 are sorted in non-decreasing order.