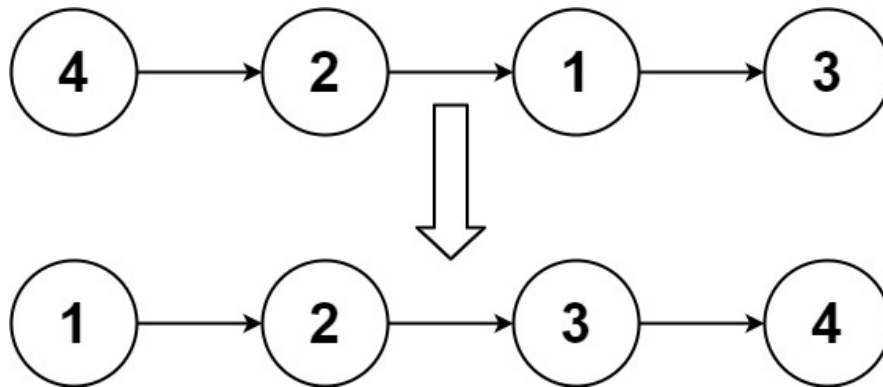


148. Sort List

Given the head of a linked list, return the list after sorting it in ascending order.

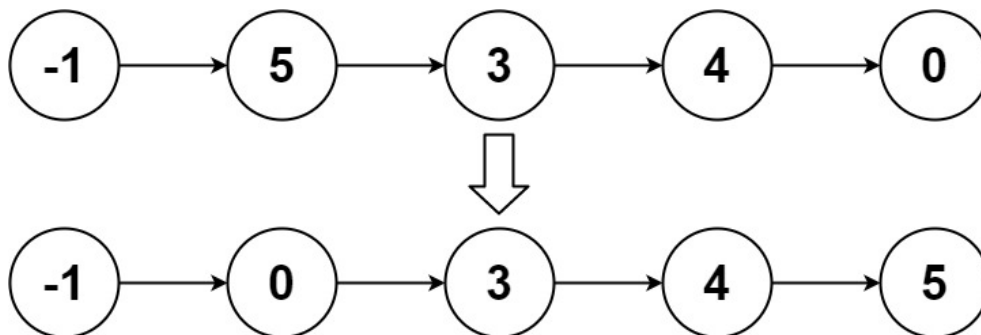
Example 1:



Input: head = [4,2,1,3]

Output: [1,2,3,4]

Example 2:



Input: head = [-1,5,3,4,0]

Output: [-1,0,3,4,5]

Example 3:

Input: head = []

Output: []

Constraints:

- The number of nodes in the list is in the range $[0, 5 * 10^4]$.
- $-10^5 \leq \text{Node.val} \leq 10^5$

Follow up: Can you sort the linked list in $O(n \log n)$ time and $O(1)$ memory (i.e. constant space)?