1. Reverse Linked List

Reverse a singly linked list and return the new head. You must reverse it **in-place** (no arrays or extra list).

Example:
Input: `1 → 2 → 3 → 4 → 5`
Output: `5 → 4 → 3 → 2 → 1`

2. Merge Two Sorted Lists

Given two sorted linked lists, merge them into one sorted list.

Example:

Input:

```
List1 = 1 → 3 → 5
List2 = 2 → 4 → 6
```

Output: `1 → 2 → 3 → 4 → 5 → 6`

3. Middle of the Linked List

Find the middle node of a singly linked list. If there are two middle nodes, return the second one.

In even nodes, you can consider any node from two as middle.

Example:

Input: 1 → 2 → 3 → 4 → 5
Output: 3

Input: 1 → 2 → 3 → 4 → 5→6
Output: 3 or 4

4. Remove Nth Node from End

Remove the **nth node from the end** of a linked list.

Example:
Input: `head = [1,2,3,4,5], n = 2`
Output: `[1,2,3,5]`

5. Linked List Cycle Detection

Detect if a linked list contains a cycle (loop).

Example:
Input: `head = [3, 2, 0, -4]`, tail connects to node index 2
Output: `true`

Input: `head = [3, 2, 0, -4]`, (3 → 2 → 0 → -4 → NULL)
Output: `false`

7. Add Two Numbers (Linked Lists)

Each linked list represents a number in reverse order. Add the two numbers and return the sum as a linked list.

Example:
Input:

`L1 = 2 → 4 → 3  (represents 342)`

`L2 = 5 → 6 → 4  (represents 465)`

Output: `7 → 0 → 8   (represents 807)`

8. Reorder List

1. Find the middle node.

2. Reverse the second half.

3. Merge both halves alternately.

Example:
Input: 1 → 2 → 3 → 4 → 5
Output: 1 → 5 → 2 → 4 → 3

9. Remove Duplicates from Sorted Linked List

Given a **sorted** linked list, delete all duplicate elements so that each element appears only once.

Example:
Input: 1 → 1 → 2 → 3 → 3
Output: 1 → 2 → 3

10. Reverse Nodes in k-Group:

Given the head of a singly linked list, reverse the nodes of the list **k at a time** and return the modified list. Nodes that remain fewer than k at the end should stay as they are (not reversed). Example:

Input: head = [1, 2, 3, 4, 5], k = 2

Output: [2, 1, 4, 3, 5]

NOTE: Your code should work for any value of K.