**EXPLANATION**

1️-:Merging Two Singly Linked Lists

How It Works

Create two singly linked lists.

Each list consists of nodes where each node has data and a next pointer to the next node.

Traverse the first list to find the last node.

Start from the head and move to the last node (temp->next == nullptr).

Attach the second list at the end of the first list.

Set temp->next = list2.head (connect the two lists).

Time Complexity

O(n) (Traversing the first list).

O(1) (Attaching the second list).

2️-:Merging Two Doubly Linked Lists

How It Works

Create two doubly linked lists.

Each node has:

data (stores value)

next (points to next node)

prev (points to previous node).

Find the last node of the first list.

Start from head and traverse until temp->next == nullptr.

Attach the second list at the end of the first list.

Set temp->next = list2.head (connect the lists).

Update list2.head->prev = temp to maintain the backward link.

Time Complexity

O(n) (Traversing the first list).

O(1) (Connecting lists and updating pointers).

