#	Pattern / Algorithm	Sample Problems	LeetCode	GFG
1	Two Pointers (Slow & Fast)	Find Middle, Detect Cycle, Find Nth from End, Intersection		
2	Reversal Techniques	Reverse LL, Reverse in K-Group, Reverse Part of LL		
3	Recursion	Reverse LL (Recursive), Flatten, Merge Sort, Add Numbers		
4	Hashing (Set/Map)	Detect Cycle with HashSet, Clone with Random Pointers, LRU Cache		
5	Merge Sort (Divide & Conquer)	Sort LL, Merge K Lists, Merge Alternating Lists		
6	Carry Logic (Addition/Multiplication)	Add 1 to LL, Add Two Numbers, Multiply Linked List Numbers		
7	Cycle Detection – Floyd’s Algorithm	Detect Loop, Find Start of Loop, Remove Loop		
8	Merge Two Sorted Linked Lists	Dummy node + recursion/iteration		
9	Clone Linked List with Random Pointers	Using HashMap (2-pass / O(1) solutions)		
10	LRU Cache (DLL + HashMap)	Design and implement with O(1) get/put		
11	DLL-Specific Algorithms	Reverse DLL, Insert/Delete, Find Pairs, Convert Tree to DLL		
12	Circular Linked List Logic	Split CLL, Insert/Delete Sorted CLL, Josephus Problem		
13	K-Group Based Reversals	Reverse K Nodes, Reverse Alternate K Nodes		
14	Palindrome Logic	Is Linked List Palindrome (Stack or Two-Pointer)		
15	Reordering Problems	Rearranged L0→Ln→L1…, Group Even-Odd, Zigzag, Fold Linked List		
16	Stack/Queue with Linked List	Implement Stack/Queue, Evaluate Expressions		
17	Linked List to BST	Convert LL to BST (sorted), Tree Leaves to DLL		
18	Flattening Linked Structures	Flatten Multilevel, Flatten BST, Flatten Child/Pointer LL		
19	Partitioning & Segregation	Partition List Around Value, 0s-1s-2s Sort, Even-Odd Separation		
20	Math/DS Combo	LFU Cache, Triplet Sum in DLL, Postfix Tree Expression		

#	Problem Description	LeetCode	GFG
1	Reverse Nodes in K-Group		

2	Rotate Linked List		
3	Swap Nodes in Pairs		
4	Segregate Even and Odd Nodes		
5	Add 1 to Linked List		
6	Add Two Numbers as Linked List		
7	Delete a Node without Head		
8	Flatten a Multilevel Linked List		
9	Reorder List (L0 → Ln → L1…)		
10	Remove Duplicates from Sorted List		
11	Remove Duplicates from Unsorted List		
12	Group Odd and Even Positioned Nodes		
13	Move Zeroes to End in Linked List		
14	Rearrange Alternate Positive and Negative Nodes		
15	Merge Two Sorted Linked Lists		
16	Merge K Sorted Linked Lists		
17	Sort a Linked List using Merge Sort		
18	Partition Linked List Around a Value		
19	Sort 0s, 1s and 2s in Linked List		
20	Insertion Sort on Linked List		
21	Quick Sort on Linked List		
22	Merge Two Lists Alternatingly		
23	Convert Linked List to Balanced BST		
24	Find Next Greater Node in Linked List		
25	DLL: Insert in Sorted Doubly Linked List		
26	DLL: Reverse a Doubly Linked List		
27	DLL: Delete Node		
28	DLL: Find Pairs with Given Sum		
29	DLL: Convert Binary Tree to DLL		
30	DLL: Convert DLL to Balanced BST		
31	DLL: Rotate DLL		
32	DLL: Delete All Occurrences of Key		
33	CLL: Check if Circular Linked List		
34	CLL: Split into Two Halves		
35	CLL: Insert into Sorted Circular LL		
36	CLL: Delete from Circular Linked List		
37	CLL: Josephus Problem		
38	Copy List with Random Pointer		
39	LRU Cache – DLL + HashMap		
40	Implement Stack using Linked List		
41	Implement Queue using Linked List		
42	Browser History (DLL based)		
43	Flatten Linked List to BST		
44	Implement LFU Cache		
45	Convert N-ary Tree to Linked List		
46	Binary Tree to Circular DLL		
47	Intersection of Three Sorted Linked Lists		
48	Reverse Alternate K Nodes in Linked List		
49	Postfix Expression to Expression Tree		
50	Triplet Sum in Sorted DLL		
51	Clone a Complex Linked List with Arbitrary Pointers		
52	Skip M Delete N Nodes		
53	Alternating Split of Linked List		
54	Sorted Insert in a Circular Linked List		
55	Find First Node of Loop		
56	Flatten a Linked List with Child Pointers		

57	Convert Binary Tree Leaves to DLL		
58	Flatten Nested List Iterator		
59	Remove Zero Sum Sublists		
60	Interleave First and Second Half		
61	Convert LL to Number and Multiply		
62	Remove Nodes with Greater Value on Right		
63	Rearrange Based on Absolute Value		
64	Maximum Twin Sum of Linked List		
65	Split Linked List in Parts		
66	Rearrange List in Zigzag Fashion		
67	Merge List from Middle		