📅 60-Day Java DSA Roadmap (Notion-Compatible Format)

Each entry includes:

- ✅ Day #
- 📌 Topic
- 🎯 Goals
- 🧠 Notes
- 🧪 Practice (LeetCode/other)
- 📚 Resources

🗂️ Notion Table Format (You can create these columns in Notion):

Day Topic Goals Notes Practice (LeetCode Qs) Resources

🧭 Week 1: Java Basics & Arrays

Day	Topic	Goals	Notes	Practice (LeetCode Qs)	Resources
1	Java Setup + Basics	Variables, Data types, Input/Output	Understand basic syntax	-	W3Schools Java
2	Loops & Conditionals	if-else, for, while, switch	Flow control mastery	-	Java Loops
3	Functions & Recursion	Define methods, recursion intro	Factorial, Fibonacci	Q: 509, 70	Java Recursion
4	Arrays Basics	Declaration, traversal, input	1D arrays	Q: 1920, 1480	GFG Arrays
5	Array Problems I	Prefix Sum, Reverse, Min/Max	Practice manipulation	Q: 53, 704	-
6	Array Problems II	Sliding Window intro	Subarrays	Q: 560, 438	-
7	2D Arrays	Matrix, Transpose, Spiral	Understand nested loops	Q: 48, 54	2D Array Java

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🧮 Week 2: Strings + Maths

Day	Topic	Goals	Notes	Practice	Resources
8	Strings in Java	StringBuilder, basic ops	Mutable strings	Q: 344, 14	Java Strings
9	String Problems I	Anagram, Palindrome	Hashing with frequency arrays	Q: 242, 125	-
10	String Problems II	Compression, Duplicates	Interview-style	Q: 443, 680	-
11	Math Basics	Prime, GCD, Binary/Decimal	Number theory intro	Q: 66, 67	Java Math

Day	Topic	Goals	Notes	Practice	Resources
12	Bit Manipulation	AND, OR, XOR, Shift	Clear bit, toggle bit	Q: 136, 191	Bits Java
13	Number Problems	Palindrome, Armstrong	Practice math logic	Q: 9, 507	-
14	Weekly Review	Revisit weak areas	Recap	Revise all	-

📦 Week 3: Searching + Sorting

Day	Topic	Goals	Notes	Practice	Resources
15	Linear & Binary Search	Logic, conditions	Iterative + Recursive	Q: 704, 35	-
16	Search Problems	Rotated arrays, peaks	Binary Search on answer	Q: 33, 852	-
17	Sorting Basics	Bubble, Selection, Insertion	Dry run and code	Q: 912	-
18	Merge Sort	Recursion, Merge logic	Stable sorting	Q: 148	MergeSort
19	Quick Sort	Partition logic	Best-case sorting	Q: 912 (try again)	-
20	Count/Sort Problems	Count sort, Dutch Flag	Sorting colors	Q: 75, 88	-
21	Sorting Review	Revisit implementations	Practice & Compare	Q: 56	-

🧵 Week 4: Recursion + Backtracking

Day	Topic	Goals	Notes	Practice	Resources
22	Recursion Deep Dive	Tree recursion	Base + recursive step	Q: 206, 21	-
23	Recursion Problems	Array recursion, sum	Simple recursions	Q: 77, 78	-
24	Backtracking Intro	Subsets, Permutations	Explore paths	Q: 46, 47	-
25	Sudoku Solver	Constraint recursion	Backtrack with board	Q: 37	-
26	N-Queens Problem	Grid-based recursion	Visualize calls	Q: 51	-
27	Maze Problems	Paths, obstacles	Grid + recursion	Q: 63, 64	-
28	Weekly Review	Practice + revise	Focus on tricky ones	Mixed Qs	-

🌳 Week 5: Linked List + Stack + Queue

Day	Topic	Goals	Notes	Practice	Resources
29	Linked List Intro	Node, insert, traverse	Singly LL	Q: 206, 876	-
30	LL Advanced	Middle, Reverse, Cycle	Fast-slow pointer	Q: 141, 234	-
31	Doubly + Circular LL	Extra pointer logic	Code & visualize	Q: 19	-
32	Stack using Array/LL	Push/pop, infix-postfix	LIFO concept	Q: 20, 150	-
33	Queue using Array/LL	Enqueue/Dequeue	FIFO concept	Q: 622	-
34	Monotonic Stack	Next Greater Element	Use stack smartly	Q: 739, 496	-
35	Review + Practice	Implement Stack &	Mixed LL/Stack	-	-

Day	Topic	Goals	Notes	Practice	Resources
		Queue	Qs		

🧠 Week 6: Trees & Heaps

Day	Topic	Goals	Notes	Practice	Resources
36	Tree Basics	Binary Tree creation	Recursion + Tree	Q: 94, 144	-
37	Tree Traversals	Inorder, Preorder, Postorder	DFS	Q: 145, 102	-
38	BST (Binary Search Tree)	Insert, Search	Sorted property	Q: 700, 98	-
39	Tree Problems	Height, Balanced	Recursive solutions	Q: 110, 104	-
40	Heaps Intro	MinHeap, MaxHeap	PriorityQueue in Java	Q: 703	[Java PriorityQueue](#)
41	Heap Problems	Top K, Median	Efficient DS	Q: 347	-
42	Tree/Heap Review	Revise tree-based logic	Mixed Qs	-	

🧩 Week 7: Hashing + Sliding Window

Day	Topic	Goals	Notes	Practice	Resources
43	HashMap & HashSet	Intro, syntax, use-cases	Map vs Set	Q: 1, 387	-
44	Hashing Problems	Count frequencies, indexes	Unordered DS	Q: 49, 217	-
45	Sliding Window Intro	Fixed window size	Arrays & Strings	Q: 3, 76	-
46	Sliding Window II	Variable window	Practice Qs	Q: 567, 438	-
47	Map + Window Combo	Pattern matching	HashMap usage	Q: 30, 438	-
48	Review: Hashing + SW	Solidify logic	Mixed Qs	-	-
49	System Design Prep I	Basics: APIs, DB, Load Balancer	Awareness	-	[System Design Primer](#)

🎯 Week 8: Graphs + DP

Day	dsdfdTopic	Goals	Notes	Practice	Resources
50	Graph Basics	Adjacency List/Matrix	BFS, DFS	Q: 200, 133	-
51	Graph Traversal	BFS, DFS	Visited array	Q: 994, 207	-
52	Dijkstra	Shortest Path, DAG	Priority Queue use	Q: 743, 210	-

Day	dsdfdTopic	Goals	Notes	Practice	Resources
	& Topo Sort				
53	DP Basics	Memoization, Tabulation	Fibonacci, Climbing	Q: 70, 198	-
54	DP 1D Problems	Robber, Jump Game	Arrays + DP	Q: 55, 198	-
55	DP 2D Problems	Grid Unique Paths	DP + Matrix	Q: 62, 63	-
56	DP Advanced	Knapsack, Subset sum	Practice	Q: 494	-

✅ Final Days: Interview + Mock

Day	Topic	Goals	Notes	Practice	Resources
57	Mock Interview 1	Timed DSA test	Simulate 60 min test	Q: Random	-
58	Mock Interview 2	New Qs	Mix of topics	Q: Random	-
59	Resume DSA Review	Mistakes log	Reinforce logic	-	-
60	Celebrate & Plan Next!	Mastered DSA 🎉	Move to Projects, LLD	-	Roadmap.sh