Company-wise DSA Qs List By Himanshu Gupta

Company Name	DSA Problem Link	Tricks for Solving Patterns
Google	Google DSA Problems	Focus on backtracking and dynamic programming.
Microsoft	Microsoft DSA Problems	Practice binary search, greedy algorithms.
Amazon	Amazon DSA Problems	Work on sliding window, heap, and DFS/BFS.
Facebook	Facebook DSA Problems	Master recursion, graphs, and bit manipulation.
Apple	Apple DSA Problems	Prioritize dynamic programming and divide and conquer.
Adobe	Adobe DSA Problems	Practice sorting and searching techniques.
Goldman Sachs	<u>Goldman Sachs DSA</u> <u>Problems</u>	Focus on arrays, hashing, and string manipulation.
Uber	<u>Uber DSA Problems</u>	Work on graphs, BFS/DFS, and Dijkstra's algorithm.
LinkedIn	<u>LinkedIn DSA Problems</u>	Focus on two-pointer and sliding window techniques.
Netflix	Netflix DSA Problems	Prioritize dynamic programming and DP on trees.
Twitter	Twitter DSA Problems	Work on greedy algorithms and interval problems.
Dropbox	<u>Dropbox DSA Problems</u>	Master recursion and binary search on sorted arrays.
Airbnb	<u>Airbnb DSA Problems</u>	Practice graph traversal and backtracking.
Salesforce	Salesforce DSA Problems	Work on greedy algorithms and dynamic programming.
Oracle	Oracle DSA Problems	Focus on matrix traversal and dynamic programming.

Company Name	DSA Problem Link	Tricks for Solving Patterns
PayPal	PayPal DSA Problems	Prioritize binary search and sorting problems.
Walmart	Walmart DSA Problems	Focus on hashing, prefix sums, and arrays.
Expedia	Expedia DSA Problems	Practice stack-based problems and recursion.
Snap	Snap DSA Problems	Focus on graphs and dynamic programming.
Yahoo	Yahoo DSA Problems	Work on linked lists and recursion.
DoorDash	<u>DoorDash DSA</u> <u>Problems</u>	Master binary trees and backtracking.
Stripe	Stripe DSA Problems	Practice greedy algorithms and string manipulation.
Lyft	<u>Lyft DSA Problems</u>	Focus on two-pointer and sliding window techniques.
Intuit	Intuit DSA Problems	Work on backtracking and dynamic programming.
IBM	IBM DSA Problems	Master dynamic programming and recursion problems.
Atlassian	Atlassian DSA Problems	Focus on graph traversal and dynamic programming.
Reddit	Reddit DSA Problems	Work on hashing and bit manipulation.
Pinterest	Pinterest DSA Problems	Master recursion and divide and conquer techniques.
Spotify	Spotify DSA Problems	Focus on sorting, searching, and heaps.
Bloomberg	Bloomberg DSA Problems	Work on arrays, dynamic programming, and graphs.
Cisco	Cisco DSA Problems	Focus on linked lists and dynamic programming.

Company Name	DSA Problem Link	Tricks for Solving Patterns
ByteDance	ByteDance DSA Problems	Master sorting algorithms and binary search.
Tesla	<u>Tesla DSA Problems</u>	Work on graph traversal and dynamic programming.
TikTok	<u>TikTok DSA Problems</u>	Prioritize dynamic programming and recursion.
Nvidia	Nvidia DSA Problems	Practice bit manipulation and backtracking.

50 tricks to identify DSA Patterns Link and other guides and cheat sheets required for DSA:

 $\underline{https://drive.google.com/drive/folders/1GbYapInWJZtFlf2mSC1HqvgYLLL_BATJ?usp=drive_link}$

3-Month Logic-Building & Problem-Solving Roadmap by HIMANSHU GUPTA (codeprime.io)

Week	Focus Area	Daily Breakdown	Checkpoints
Week 1	Foundation: Basics of Programming	Day 1-2: Learn variables, data types, loops (for, while). Day 3-4: Conditionals, functions. Day 5-6: Arrays & Strings basics. Day 7: Solve 10 simple pattern-building questions (stars, triangles).	✓ Understand basic syntax and concepts. ✓ Solve 10 pattern-building problems.
Week 2	Introduction to Problem Solving	Day 1-2: Learn dry-run and pseudocode. Day 3-5: Solve 10 simple DSA problems (easy level, e.g., reverse array, Fibonacci). Day 6-7: Build Mini Project 1: Calculator App.	Solve 10 DSA problems. Complete Mini Project 1: Calculator App.

Week	Focus Area	Daily Breakdown	Checkpoints
Week 3	Level Up: Arrays & Logic Thinking	Day 1-2: Advanced array techniques (sliding window, prefix sum). Day 3-6: Solve 15 array-based problems (medium level). Day 7: Build Mini Project 2: Tic-Tac-Toe Game.	✓ Solve 25 total DSA problems (15 new). ✓ Complete Mini Project 2: Tic-Tac-Toe Game.
Week 4	Strings & Problem-Solving Practice	Day 1-2: String manipulation (reversal, palindromes, substrings). Day 3-5: Solve 15 string-based problems (easy-medium). Day 6-7: Build Mini Project 3: Text Manipulation Tool (e.g., Uppercase, Reverse).	Solve 40 total DSA problems (15 new). Complete Mini Project 3: Text Tool.
Week 5	Recursion & Logic Expansion	Day 1-2: Learn recursion basics (factorial, Fibonacci). Day 3-5: Solve 10 recursion-based problems (medium level). Day 6-7: Build Mini Project 4: Recursive Maze Solver.	Solve 50 total DSA problems (10 new). Complete Mini Project 4: Recursive Maze Solver.
Week 6	Data Structures: Stacks & Queues	Day 1-2: Learn stacks and queues basics. Day 3-6: Solve 15 problems (balanced parentheses, queue reversal). Day 7: Work on Mini Project 5: Browser History Tracker (using stack).	✓ Solve 65 total DSA problems (15 new). ✓ Complete Mini Project 5: Browser History Tracker.
Week 7	Dynamic Programming Introduction	Day 1-3: Learn DP basics (knapsack, Fibonacci with memoization). Day 4-6: Solve 10 DP problems (easy-medium). Day 7: Revise all past concepts/projects.	Solve 75 total DSA problems (10 new). Master basic DP problems.

Week	Focus Area	Daily Breakdown	Checkpoints
Week 8	Advanced Problem Solving (Graph)	Day 1-2: Learn graph representation (adjacency list/matrix). Day 3-5: Solve 10 graph-based problems (BFS/DFS). Day 6-7: Build a Mini Project: Path Finder Visualizer.	Solve 85 total DSA problems (10 new). Complete Graph-Based Mini Project.
Week 9	Advanced DSA (Sorting/Greedy)	Day 1-2: Learn sorting algorithms (merge sort, quicksort). Day 3-5: Solve 15 problems on sorting/greedy (e.g., activity selection, job scheduling).	Solve 100 DSA problems (15 new).
Week 10-11	Integration: Complex Projects	Day 1-7: Brainstorm and build Project 1: Expense Tracker with Charts. Next 7 days: Build Project 2: Multiplayer Rock-Paper-Scissors Game (WebSockets, if possible).	✓ Integrate past knowledge into real-world projects. ✓ Master real-world application-building.
Week 12	Final Touches and Mock Practice	Day 1-3: Revise all concepts learned. Day 4-6: Solve 10 problems from past mistakes or blindspots. Day 7: Build a final project of your choice integrating at least one complex DSA concept.	✓ Complete final project. ✓ Feel confident in solving beginner-intermediate DSA problems.

How to Think of Logic

- 1. **Break Down the Problem**: Read the question twice. Identify inputs, outputs, and constraints.
- 2. **Start with Examples**: Create test cases manually and simulate the solution step-by-step.
- 3. Write Pseudocode: Draft a high-level plan before coding.
- 4. **Ask "Why?" at Every Step**: Understand each operation; don't memorize solutions.
- 5. Visualize: Use diagrams or dry-run tables to debug.
- 6. **Optimize Gradually**: Start with brute force; iterate to optimize for efficiency.

> 100 DSA Questions for Logic Building

Category	Question Name	Platform	Link
Basics & Warm-Up	Print a pattern of stars (triangle, pyramid)	GeeksforGeek s	<u>Link</u>
	Reverse a number	GeeksforGeek s	<u>Link</u>
	Check if a number is palindrome	GeeksforGeek s	<u>Link</u>
	Count digits in a number	GeeksforGeek s	<u>Link</u>
	Find factorial of a number	HackerRank	<u>Link</u>
Arrays	Reverse an array	LeetCode	<u>Link</u>
	Find the maximum and minimum of an array	GeeksforGeek s	<u>Link</u>
	Rotate an array by K steps	LeetCode	<u>Link</u>
	Move all zeroes to the end	LeetCode	<u>Link</u>
	Kadane's Algorithm (Maximum Subarray Sum)	LeetCode	<u>Link</u>
Strings	Reverse a string	LeetCode	<u>Link</u>
	Check if two strings are anagrams	LeetCode	<u>Link</u>
	Longest Common Prefix	LeetCode	<u>Link</u>
	Check if a string is a palindrome	LeetCode	<u>Link</u>
	Count and say	LeetCode	<u>Link</u>
Recursion	Fibonacci series using recursion	GeeksforGeek s	<u>Link</u>
	Tower of Hanoi	GeeksforGeek s	<u>Link</u>

Category	Question Name	Platform	Link
	Factorial using recursion	LeetCode	<u>Link</u>
	Reverse a linked list using recursion	LeetCode	<u>Link</u>
	Permutations of a string	GeeksforGeek s	<u>Link</u>
Sorting	Bubble sort	GeeksforGeek s	<u>Link</u>
	Selection sort	GeeksforGeek s	<u>Link</u>
	Merge sort	GeeksforGeek s	<u>Link</u>
	Quick sort	GeeksforGeek s	<u>Link</u>
	Insertion sort	GeeksforGeek s	<u>Link</u>
Searching	Binary search	LeetCode	<u>Link</u>
	Linear search	GeeksforGeek s	<u>Link</u>
	Search in a rotated sorted array	LeetCode	<u>Link</u>
	First and last position in a sorted array	LeetCode	<u>Link</u>
	Square root of a number (using binary search)	LeetCode	<u>Link</u>
Linked List	Reverse a linked list	LeetCode	<u>Link</u>
	Detect a cycle in a linked list	LeetCode	<u>Link</u>
	Merge two sorted linked lists	LeetCode	<u>Link</u>
	Remove Nth node from the end	LeetCode	<u>Link</u>

Category	Question Name	Platform	Link
	Find the middle of a linked list	LeetCode	<u>Link</u>
Stacks & Queues	Implement a stack using arrays	LeetCode	<u>Link</u>
	Evaluate postfix expression	GeeksforGeek s	<u>Link</u>
	Balanced parentheses	LeetCode	<u>Link</u>
	Next greater element	LeetCode	<u>Link</u>
	Implement a queue using stacks	LeetCode	<u>Link</u>
Dynamic Programming	0/1 Knapsack problem	GeeksforGeek s	<u>Link</u>
	Fibonacci using dynamic programming	LeetCode	<u>Link</u>
	Longest common subsequence	LeetCode	<u>Link</u>
	Longest increasing subsequence	LeetCode	<u>Link</u>
	Minimum steps to reach the end	LeetCode	<u>Link</u>
Graphs	BFS traversal	GeeksforGeek s	<u>Link</u>
	DFS traversal	GeeksforGeek s	<u>Link</u>
	Detect cycle in an undirected graph	GeeksforGeek s	<u>Link</u>
	Shortest path in a graph (Dijkstra's)	GeeksforGeek s	<u>Link</u>
	Topological sort	GeeksforGeek s	<u>Link</u>

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