

TOP 150

DSA Interview Questions



Asked In Product-Based Companies & Startups



Disclaimer

EVERYONE LEARNS UNIQUELY.

What matters is developing the problem solving ability
to solve new problems.

This Doc will help you with the same.

Introduction —

Preparing for coding interviews often requires both depth and focus. Companies, whether high-growth startups or established product-based organizations, expect strong command over Data Structures and Algorithms (DSA).

To help you prepare effectively, we have curated the **Top 150 DSA Interview Questions**, organized topic by topic for structured practice.

This resource is designed to provide:

- Clarity by topic with questions arranged systematically.
- Balanced coverage of patterns asked in both startups and product-based companies.
- Practical progression from fundamental to advanced problem-solving.

Whether you are revisiting core concepts or aiming to refine your advanced skills, this guide will help you approach interviews with confidence and precision.

01

ARRAYS

Product-Based Companies (PBC):

#	Algorithm	Practice Link	Asked in
01	Two Sum	 Link	  
02	Best Time To Buy And Sell Stock	 Link	  
03	Product Of Array Except Self	 Link	  
04	Maximum Subarray	 Link	  
05	Maximum Product Subarray	 Link	  
06	Search In Rotated Sorted Array	 Link	
07	3 Sum	 Link	  

#	Algorithm	Practice Link	Asked in
08	Trapping Rain Water	 Link	
09	Merge Intervals	 Link	
10	Container With Most Water	 Link	

Startups:

#	Algorithm	Practice Link	Asked in
11	Rotate Array	 Link	
12	Sort Colors (Dutch National Flag)	 Link	
13	Equilibrium Index	 Link	
14	Kth Largest Element In An Array	 Link	

#	Algorithm	Practice Link	Asked in
15	Count Inversions	 Link	
16	Maximum Sum Circular Subarray	 Link	
17	Merge Sorted Arrays Without Extra Space	 Link	
18	Find Duplicates In Array	 Link	
19	Wave Array	 Link	
20	Alternate High Low Array	 Link	

Product-Based Companies (PBC):

#	Algorithm	Practice Link	Asked in
21	Longest Substring Without Repeating Characters	 Link	  
22	Group Anagrams	 Link	 
23	Longest Palindromic Substring	 Link	 
24	Smallest Window Containing All Characters	 Link	 
25	Check For Anagram	 Link	 
26	Longest Common Prefix	 Link	 
27	String To Integer (Atoi)	 Link	 

#	Algorithm	Practice Link	Asked in
28	Valid Palindrome	 Link	 
29	Implement StrStr()	 Link	 
30	Multiply Strings	 Link	 

Startups:

#	Algorithm	Practice Link	Asked in
31	Remove Duplicate Characters	 Link	 
32	Check Balanced Parentheses	 Link	 
33	Reverse Words In A Sentence	 Link	 
34	Count And Say	 Link	 

#	Algorithm	Practice Link	Asked in
35	Run-Length Encoding	 Link	
36	Compare Version Numbers	 Link	
37	Longest Prefix Suffix (KMP)	 Link	
38	String Compression	 Link	
39	Check If Rotations	 Link	
40	Check If Strings Are Isomorphic	 Link	

03

MATRIX

Product-Based Companies (PBC):

#	Algorithm	Practice Link	Asked in
41	Set Matrix Zeroes	 Link	 
42	Spiral Matrix	 Link	
43	Search A 2D Matrix	 Link	 
44	Word Search	 Link	 
45	Rotate Image (Matrix)	 Link	 
46	Number Of Islands	 Link	 
47	Max Area Of Island	 Link	 

#	Algorithm	Practice Link	Asked in
48	Flood Fill	 Link	
49	Matrix Block Sum	 Link	 
50	Diagonal Traverse	 Link	 

Startups:

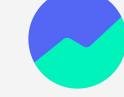
#	Algorithm	Practice Link	Asked in
51	Transpose Of A Matrix	 Link	
52	Boolean Matrix Problem	 Link	 
53	Find Row With Max 1s	 Link	 

#	Algorithm	Practice Link	Asked in
54	Search Element In Sorted Matrix	 Link	 
55	Count Total Set Bits In Matrix	 Link	 
56	Rotate Matrix By 90 Degree	 Link	 
57	Find Median In Row-Wise Sorted Matrix	 Link	 
58	Count Squares In Binary Matrix	 Link	
59	Kth Smallest Element In Sorted Matrix	 Link	 
60	Matrix Diagonal Sum	 Link	 

Product-Based Companies (PBC):

#	Algorithm	Practice Link	Asked in
61	Next Greater Element	 Link	  
62	Valid Parentheses	 Link	 
63	Evaluate Reverse Polish Notation	 Link	 
64	Implement Queue Using Stacks	 Link	 
65	The Celebrity Problem	 Link	 

Startups:

#	Algorithm	Practice Link	Asked in
66	Stock Span Problem	 Link	 
67	Sliding Window Maximum	 Link	 
68	Implement Stack Using Queues Companies: Curefit, PhonePe	 Link	 
69	First Non-Repeating Character In Stream	 Link	 
70	LRU Cache (Design)	 Link	

Product-Based Companies (PBC):

#	Algorithm	Practice Link	Asked in
71	Maximum Depth Of Binary Tree	 Link	
72	Validate Binary Search Tree	 Link	 
73	Lowest Common Ancestor Of BST	 Link	 
74	Binary Tree Level Order Traversal	 Link	
75	Invert/Flip Binary Tree	 Link	 
76	Serialize And Deserialize Binary Tree	 Link	 
77	Construct Binary Tree From Preorder And Inorder	 Link	 

#	Algorithm	Practice Link	Asked in
78	Path Sum	 Link	
79	Symmetric Tree	 Link	
80	Subtree Of Another Tree	 Link	

Startups:

#	Algorithm	Practice Link	Asked in
81	Print Boundary Of Binary Tree	 Link	 
82	Right View Of Binary Tree	 Link	 
83	Left View Of Binary Tree	 Link	 
84	Convert Binary Tree To DLL	 Link	 

#	Algorithm	Practice Link	Asked in
85	K Distance From Root	 Link	 
86	Zigzag Level Order Traversal	 Link	
87	Print All Root To Leaf Paths	 Link	 
88	Flatten Binary Tree To Linked List	 Link	 
89	Diagonal Traversal Of Binary Tree	 Link	 
90	Bottom View Of Binary Tree	 Link	 

Product-Based Companies (PBC):

#	Algorithm	Practice Link	Asked in
91	Top K Frequent Elements	 Link	  
92	Find Median From Data Stream	 Link	 
93	Kth Largest Element In An Array	 Link	 
94	Merge K Sorted Lists	 Link	 

Startups:

#	Algorithm	Practice Link	Asked in
95	Rearrange Characters By Frequency	 Link	 

Product-Based Companies (PBC):

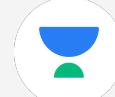
#	Algorithm	Practice Link	Asked in
96	Number Of Islands	 Link	  
97	Clone Graph	 Link	 
98	Course Schedule	 Link	 
99	Pacific Atlantic Water Flow	 Link	 
100	Detect Cycle In Directed Graph	 Link	 
101	Check Bipartite Graph	 Link	 
102	Topological Sorting	 Link	 

#	Algorithm	Practice Link	Asked in
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103	Flood Fill Algorithm	 Link	 
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Startups:

#	Algorithm	Practice Link	Asked in
104	Snake And Ladder Problem	 Link	 
105	Dijkstra's Algorithm	 Link	 
106	Bellman-Ford Algorithm	 Link	 
107	Detect Cycle In Undirected Graph	 Link	 
108	Union-Find Cycle Detection	 Link	 
109	Minimum Spanning Tree (Prim's)	 Link	 

#	Algorithm	Practice Link	Asked in
110	Kruskal's Algorithm	 Link	 
111	Detect Cycle In A Graph Using DFS	 Link	 

08

BIT MANIPULATION

Product-Based Companies (PBC):

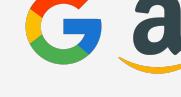
#	Algorithm	Practice Link	Asked in
112	Single Number	 Link	
113	Power Of Two	 Link	
114	Sum Of Two Integers (No + Or -)	 Link	
115	Number Of Steps To Reduce A Number To Zero	 Link	 

Startups:

#	Algorithm	Practice Link	Asked in
116	Check If A Number Is Sparse	 Link	

#	Algorithm	Practice Link	Asked in
117	Swap All Odd And Even Bits	 Link	 
118	Check If Power Of 4	 Link	 

Product-Based Companies (PBC):

#	Algorithm	Practice Link	Asked in
119	0/1 Knapsack Problem	 Link	
120	Longest Increasing Subsequence	 Link	
121	Longest Common Subsequence	 Link	
122	Word Break	 Link	
123	Coin Change	 Link	
124	Decode Ways	 Link	
125	Unique Paths With Obstacles	 Link	

#	Algorithm	Practice Link	Asked in
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126	Rod Cutting	 Link	
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Startups:

#	Algorithm	Practice Link	Asked in
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127	Subset Sum Problem	 Link	
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128	Combination Sum	 Link	
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129	Jump Game	 Link	
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130	Count Number Of Ways To Cover Distance	 Link	
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131	Climbing Stairs (Nth Stair Problem)	 Link	
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132	House Robber (Max Stolen Value)	 Link	
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#	Algorithm	Practice Link	Asked in
133	Minimum Cost Climbing Stairs	 Link	 
134	Minimum Path Sum	 Link	 

Product-Based Companies (PBC):

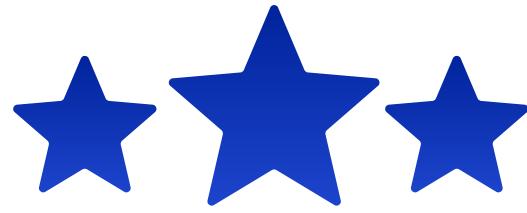
#	Algorithm	Practice Link	Asked in
135	Activity Selection Problem	 Link	
136	Job Sequencing Problem	 Link	
137	Fractional Knapsack	 Link	
138	Minimum Number Of Platforms	 Link	
139	Huffman Coding	 Link	
140	Dijkstra's Algorithm (Greedy + Graph)	 Link	
141	Minimum Cost Of Ropes	 Link	

#	Algorithm	Practice Link	Asked in
142	Candy	 Link	
143	Gas Station	 Link	 

Startups:

#	Algorithm	Practice Link	Asked in
144	Coin Change (Min Number Of Coins)	 Link	 
145	Jump Game II	 Link	 
146	Lemonade Change	 Link	 
147	Assign Cookies	 Link	 
148	Maximum Units On A Truck	 Link	 

#	Algorithm	Practice Link	Asked in
149	Minimum Add To Make Parentheses Valid	 Link	 
150	Partition Labels	 Link	 



WHY BOSSCODER?

01

STRUCTURED INDUSTRY-VETTED CURRICULUM

Our curriculum covers everything you need to get become a skilled software engineer & get placed.

02

1:1 MENTORSHIP SESSIONS

You are assigned a personal mentor currently working in Top product based companies.

03

2200+ ALUMNI PLACEMENT

2200+ Alumni placed at Top Product-based companies.

04

24 LPA AVERAGE PACKAGE

Our Average Placement Package is **24 LPA** and highest is **98 LPA**



Niranjan Bagade

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British Petroleum

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Hike
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