DSA by Shradha Didi & Aman Bhaiya

APPLE DSA SHEET

	How to solve this sheet?		

Easy	Ideal Time : 5-10 mins
Medium	Ideal Time : 15-20 mins
Hard	Ideal Time : 40-60 mins (based on Qs) | 88 Qs

5 Questions each Day

Topics	Question (375)	Companies	Remarks
Arrays	Maximum and Minimum Element in an Array	ABCO Accolite Amazon Cisco Hike Microsoft Snapdeal VMWare Google Adobe	
Arrays	Reverse the Array	Infosys Moonfrog Labs	
Arrays	Maximum-Subarray	Microsoft + Facebook Interview Qs	use Kadane's Algorithm
Arrays	Contains Duplicate	Amazon Interview Qs	
Arrays	Chocolate Distribution Problem	Amazon Interview Qs	
Arrays	Search in Rotated Sorted Array	Microsoft Google Adobe Amazon D-E-Shaw Flipkart Hike Intuit MakeMyTrip Paytm	
Arrays	Next Permutation	Uber + Goldman Sachs + Adobe Interview Qs	
Arrays	Best time to Buy and Sell Stock	Amazon D-E-Shaw Directi Flipkart Goldman Sachs Intuit MakeMyTrip Microsoft Ola Cabs Oracle Paytm Pubmatic Quikr Salesforce Sapient Swiggy Walmart Media.net Google	
Arrays	Repeat and Missing Number Array	Amazon Interview Qs	
Arrays	Kth-Largest Element in an Array	Amazon Microsoft Walmart Adobe	
Arrays	Trapping Rain Water	Samsung Interview Qs	
Arrays	Product of Array Except Self	Microsoft + Facebook Interview Qs	
Arrays	Maximum Product Subarray	Amazon D-E-Shaw Microsoft Morgan Stanley OYO Rooms Google	
Arrays	Find Minimum in Rotated Sorted Array	Adobe Amazon Microsoft Morgan Stanley Samsung Snapdeal Times Internet	
Arrays	Find Pair with Sum in Sorted & Rotated Array	Microsoft + Google + Apple Interview Qs	
Arrays	3Sum	Adobe Amazon Microsoft Morgan Stanley Samsung Snapdeal Times Internet	
Arrays	Container With Most Water	Flipkart + Dunzo Interview Qs	
Arrays	Given Sum Pair	Infosys + Amazon + Flipkart Interview Qs	
Arrays	Kth - Smallest Element	ABCO Accolite Amazon Cisco Hike Microsoft Snapdeal VMWare Google Adobe	
Arrays	Merge Overlapping Intervals	Google Interview Qs	
Arrays	Find Minimum Number of Merge Operations to Make an Array Palindrome	Amazon	
Arrays	Given an Array of Numbers Arrange the Numbers to Form the Biggest Number	Barclays Interview Qs	
Arrays	Space Optimization Using Bit Manipulations	Amazon	
Arrays	Subarray Sum Divisible K	Snapdeal Microsoft	
Arrays	Print all Possible Combinations of r Elements in a Given Array of Size n	Amazon	
Arrays	Mo's Algorithm	Microsoft	
Strings	Valid Palindrome	Amazon Cisco D-E-Shaw Facebook FactSet Morgan Stanley Paytm Zoho	
Strings	Valid Anagram	Nagarro Media.net Directi Google Adobe Flipkart	
Strings	Valid parentheses	Google Interview Qs	use Stacks (if possible)
Strings	Remove Consecutive Characters	Samsung + Adobe	
Strings	Longest Common Prefix	Adobe + Grofers + Dunzo Interview Qs	
Strings	Convert a Sentence into its Equivalent Mobile Numeric Keypad Sequence	Adobe	
Strings	Print all the Duplicates in the Input String	Ola + Amdocs IQ	
Strings	Longest Substring without Repeating Characters	Morgan Stanley + Amazon IQ	
Strings	Longest Repeating Character Replacement	Amazon Google	
Strings	Group Anagrams	Samsung + Adobe + Amazon Interview Qs	
Strings	Longest Palindromic Substring	Microsoft + Google + Samsung + Visa IQ	
Strings	Palindromic Substrings	Microsoft IQ	
Strings	Next Permutation	Adobe + Goldman Sachs + Uber	
Strings	Count Palindromic Subsequences	Myntra Interview Qs	
Strings	Smallest Window in a String Containing all the Characters of Another String	Microsoft + Amazon IQ	
Strings	Wildcard String Matching	Microsoft + Amazon + Ola IQ	
Strings	Longest Prefix Suffix	Flipkart + Swiggy IQ	
Strings	Rabin-Karp Algorithm for Pattern Searching	Microsoft	
Strings	Transform One String to Another using Minimum Number of Given Operation	Directi	
Strings	Minimum Window Substring	Amazon Google MakeMyTrip Streamoid Technologies Microsoft Media.net Atlassian Flipkart	
Strings	Boyer Moore Algorithm for Pattern Searching	Amdocs	
Strings	Word Wrap	Microsoft	use Dynaming Programming
2D Arrays	Zigzag (or diagonal) Traversal of Matrix	Amazon	
2D Arrays	Set Matrix Zeroes	Amazon Microsoft	
2D Arrays	Spiral Matrix	Flipkart + Apple + Societe Generale IQ	
2D Arrays	Rotate Image	Microsoft Paytm Samsung Adobe	
2D Arrays	Word Search	Google + Ola + Goldman Sachs IQ	
2D Arrays	Find the Number of Islands | Set 1 (Using DFS)	Microsoft + Uber + Apple + Amazon IQ	Read about DFS
2D Arrays	Given a Matrix of 'O' and 'X', Replace 'O' with 'X' if Surrounded by 'X'	Google	
2D Arrays	Find a Common Element in all Rows of a Given Row-Wise Sorted Matrix	MAQ Software Microsoft VMWare	
2D Arrays	Create a Matrix with Alternating Rectangles of O and X	MAQ VMWare	
2D Arrays	Maximum Size Rectangle of all 1s	Amazon Microsoft	
Searching & Sorting	Permute Two Arrays such that Sum of Every Pair is Greater or Equal to K	Samsung	
Searching & Sorting	counting sort	Samsung+ Morgan Stanley+ Snapdeal + EPAM Systems	
Searching & Sorting	find common elements three sorted arrays	MAQ Software Microsoft VMWare	
Searching & Sorting	Searching in an array where adjacent differ by at most k	TCS Amazon	
Searching & Sorting	ceiling in a sorted array	TCS	
Searching & Sorting	Piar with given difference	Amazon Visa	
Searching & Sorting	majority element	Amazon+ Google	
Searching & Sorting	count triplets with sum smaller that a given value	Amazon SAP Labs	
Searching & Sorting	Maximum Sum Subsequence with no adjacent elements	Amazon FactSet Oxigen Wallet OYO Rooms Paytm Walmart Yahoo Adobe Flipkart	
Searching & Sorting	Merge Sorted Arrays using O(1) Space	Amdocs Brocade Goldman Sachs Juniper Networks Linkedin Microsoft Quikr Snapdeal Synopsys Zoho Adobe	
Searching & Sorting	Inversion of Array	Adobe Amazon BankBazaar Flipkart Microsoft Myntra MakeMyTrip	
Searching & Sorting	Find Duplicates in O(n) Time and O(1) Extra Space	Amazon D-E-Shaw Flipkart Paytm Qualcomm Zoho	
Searching & Sorting	Radix Sort	Amazon+ Microsoft	
Searching & Sorting	Product of Array except itself	Accolite Amazon D-E-Shaw Intuit Morgan Stanley Opera Microsoft Flipkart	
Searching & Sorting	Make all Array Elements Equal	Amazon	
Searching & Sorting	Check if Reversing a Sub Array Make the Array Sorted	Amazon	
Searching & Sorting	Find Four Elements that Sum to a Given Value	Adobe Amazon Google Microsoft OYO Rooms	
Searching & Sorting	Median of Two Sorted Array with Different Size	Amazon Samsung Microsoft Google	
Searching & Sorting	Median of Stream of Integers Running Integers	Amazon + Google	
Searching & Sorting	Print Subarrays with 0 Sum	Paytm Adobe	
Searching & Sorting	Aggressive Cows	Adobe	
Searching & Sorting	Allocate Minimum number of Pages	Google Infosys Codenation Amazon Microsoft	
Searching & Sorting	Minimum Swaps to Sort	Amazon + Google	
Backtracking	Backtracking Set 2 Rat in a Maze	Microsoft Amazon	
Backtracking	Combinational Sum	Adobe Amazon Microsoft	
Backtracking	Crossword-Puzzle	Microsoft	
Backtracking	Longest Possible Route in a Matrix with Hurdles	Microsoft	
Backtracking	Printing all solutions in N-Queen Problem	Accolite Amazon Amdocs D-E-Shaw MAQ Software Twitter Visa Microsoft	
Backtracking	Solve the Sudoku	Amazon Directi Flipkart MakeMyTrip MAQ Software Microsoft Ola Cabs Oracle PayPal Zoho	
Backtracking	Partition Equal Subset Sum	Amazon + Adobe + Accolite + Traveloka	
Backtracking	M Coloring Problem	Amazon	
Backtracking	Knight Tour	IBM	
Backtracking	Soduko	Amazon + Adobe + Accolite + Traveloka	
Backtracking	Remove Invalid Parentheses	Uber	
Backtracking	Word Break Problem using Backtracking		
Backtracking	Print all Palindromic Partitions of a String	Facebook Amazon Microsoft	
Backtracking	Find Shortest Safe Route in a Path with Landmines	Facebook Amazon Microsoft	
Backtracking	Partition of Set into K Subsets with Equal Sum	Amazon	
Backtracking	Backtracking set-7 hamiltonian cycle	Amazon	
Backtracking	tug-of-war	Google	
Backtracking	Maximum Possible Number by doing at most K swaps	Amazon + Adobe + Accolite + Traveloka	
Backtracking	Backtracking set-8 solving cryptarithmetic puzzles	Goldman Sachs	
Backtracking	Find paths from corner cell to middle cell in maze	Meta	
Backtracking	Arithmetic Expressions	Flipkart	
Linked List	Reverse Linked List	Sprinklr	
Linked List	Linked List Cycle	Accolite Amazon D-E-Shaw Hike Lybrate Mahindra Comviva MakeMyTrip MAQ Software OYO Rooms Paytm Qualcomm Samsung SAP Labs Snapdeal Veritas VMWare Walmart Adobe	
Linked List	Merge Two Sorted Lists	Accolite Amazon Belzabar Brocade FactSet Flipkart MakeMyTrip Microsoft OATS Systems Oracle Samsung Synopsys Zoho	
Linked List	Delete without Head node	Amazon Goldman Sachs Kritikal Solutions Microsoft Samsung Visa	
Linked List	Remove duplicates from an unsorted linked list	Amazon Intuit	
Linked List	Sort a linked list of 0s-1s-or-2s	Microsoft Amazon MakeMyTrip	
Linked List	Multiply two numbers represented linked list	Amazon	
Linked List	Remove nth node from end of list	Accolite Adobe Amazon Citicorp Epic Systems FactSet Hike MAQ Software Monotype Solutions Morgan Stanley OYO Rooms Qualcomm Samsung Snapdeal Flipkart	
Linked List	Reorder List	Amazon Microsoft OYO Rooms Intuit	
Linked List	Detect and remove loop in a linked list	Accolite Amazon D-E-Shaw Hike Lybrate Mahindra Comviva MakeMyTrip MAQ Software OYO Rooms Paytm Qualcomm Samsung SAP Labs Snapdeal Veritas VMWare Walmart Adobe	
Linked List	Write a Function to get the Intersection Point of two Linked Lists	Amazon	
Linked List	Flatten a linked list with next and child pointers	Google	
Linked List	Linked list in zig-zag fashion	Micorsoft	
Linked List	Reverse a doubly linked list	Walmart	
Linked List	Delete nodes which have a greater value on right side	Amazon	
Linked List	Segregate even and odd Elements in a Linked List	Walmart	
Linked List	Point to next higher value node in a linked list with an Arbitrary Pointer	GeekyAnts	
Linked List	Rearrange a given linked list in place	Ola Uber	
Linked List	Sort Biotonic Doubly Linked Lists	Morgan Stanley	
Linked List	Merge K Sorted Lists	Microsoft+ Ola+ eBay	
Linked List	Merge sort for linked list	Accolite Adobe Amazon MAQ Software Microsoft Paytm Veritas	Important
Linked List	Quicksort on singly-linked list	Paytm	Important
Linked List	Sum of two linked lists	Accolite Amazon Flipkart MakeMyTrip Microsoft Morgan Stanley Qualcomm Snapdeal	
Linked List	Flattening a linked list	24*7 Innovation Labs Amazon Drishti-Soft Flipkart Goldman Sachs Microsoft Paytm Payu Qualcomm Snapdeal Visa	
Linked List	Clone a linked list with next and random Pointer	Triology	
Linked List	Subtract two numbers represented as linked lists	Amazon Goldman Sachs	
Stacks & Queues	Implement two stacks in an Array	24*7 Innovation Labs Microsoft Samsung Snapdeal	
Stacks & Queues	Evaluation of Postfix Expression	Amazon + Google + Facebook	
Stacks & Queues	Implement Stack using Queues	Facebook	
Stacks & Queues	Queue Reversal	Amazon + Morgain Stanley	
Stacks & Queues	Implement Stack Queue using Deque	Microsoft +Atlassian	

Category	Problem	Companies
Stacks & Queues	Reverse first k elements of queue	Microsoft + Amdocs
Stacks & Queues	Design Stack with Middle Operation	MaQ Software
Stacks & Queues	Infix to Postfix	Amazon + Samsung + Paytm + Vmware inc
Stacks & Queues	Design and Implement Special stack	Amazon Google Microsoft Visa Goldman Sachs
Stacks & Queues	Longest Valid String	Google Microsoft
Stacks & Queues	Find if an expression has duplicate parenthesis or not	Flipkart Oracle OYO Rooms Snapdeal Walmart Yatra.com Microsoft Google
Stacks & Queues	Stack permutations check if an array is stack permutation of other	Visa
Stacks & Queues	Count natural numbers whose permutation greater number	Amazon
Stacks & Queues	Sort a stack using Recursion	Amazon Goldman Sachs IBM Intuit Kuliza Yahoo Microsoft
Stacks & Queues	Queue based approach for first non repeating character in a stream	Microsoft Flipkart
Stacks & Queues	The Celebrity Problem	Google + Visa + Apple
Stacks & Queues	Next larger Element	Visa
Stacks & Queues	Distance of nearest cell	Flipkar + Facebook
Stacks & Queues	Rotten-oranges	Facebook
Stacks & Queues	Next smaller element	Codenation
Stacks & Queues	Circular-tour	Codenation Flipkart
Stacks & Queues	Efficiently implement k-stacks single array	Flipkart
Stacks & Queues	The celebrity problem	Google + Visa + Apple
Stacks & Queues	Iterative tower of hanoi	Microsoft Flipkart
Stacks & Queues	Find the maximum of minimums for every window size in a given array	Amazon Microsoft Flipkart
Stacks & Queues	lru cache implementation	Microsoft + Uber + Alibaba
Stacks & Queues	Find a tour that visits all stations	Uber
Greedy	Activity selection problem greedy algo	Facebook Morgan Stanley Flipkart
Greedy	Greedy algorithm to find minimum number of coins	Accolite Amazon Morgan Stanley Oracle Paytm Samsung Snapdeal Synopsys Visa Microsoft Google
Greedy	Minimum sum two numbers formed digits array-2	Google
Greedy	Minimum sum absolute difference pairs two arrays	Amazon
Greedy	Find maximum height pyramid from the given array of objects	Flipkart Amazon
Greedy	Minimum cost for acquiring all coins with k extra coins allowed with every coin	
Greedy	Find maximum equal sum of every three stacks	Microsoft Amazon Flipkart
Greedy	Job sequencing problem	Microsoft + Acolite
Greedy	Greedy algorithm egyptian fraction	
Greedy	Fractional knapsack problem	Microsoft
Greedy	Maximum length chain of pairs	Amazon Microsoft
Greedy	Find smallest number with given number of digits and digit sum	MAQ Software OYO Rooms
Greedy	Maximize sum of consecutive differences circular-array	Maccafe
Greedy	paper-cut minimum number squares	Google
Greedy	Lexicographically smallest array-k consecutive swaps	Amazon
Greedy	Problems-CHOCOLA	Flipkart
Greedy	Find minimum time to finish all jobs with given constraints	
Greedy	Job sequencing using disjoint set union	Samsung
Greedy	Rearrange characters string such that no two adjacent are same	Amazon Microsoft
Greedy	Minimum edges to reverse to make path from a source to a destination	
Greedy	Minimize Cash Flow among a given set of friends who have borrowed money from each other	
Greedy	Minimum Cost to cut a board into squares	Maccafe
Binary Trees	Maximum Depth of Binary Tree	Amazon Cadence India CouponDunia D-E-Shaw FactSet FreeCharge MakeMyTrip
Binary Trees	Reverse Level Order Traversal	Amazon + Microsoft + flipkart + Adobe
Binary Trees	Subtree of Another Tree	Amazon + Microsoft + Facebook
Binary Trees	Invert Binary Tree	Amazon Hike
Binary Trees	Binary Tree Level Order Traversal	Accolite Adobe Amazon Cisco D-E-Shaw Flipkart
Binary Trees	Left View of Binary Tree	Microsoft + Adobe + Cisco Networking Academy
Binary Trees	Right View of Binary Tree	Amdocs
Binary Trees	ZigZag Tree Traversal	Amazon Cisco FactSet Hike Snapdeal Walmart Microsoft Flipkart
Binary Trees	Create a mirror tree from the given binary tree	Accolite Adobe Amazon Belzabar EBay Goldman Sachs Microsoft Morgan Stanley Myntra Ola Cabs Paytm
Binary Trees	Leaf at same level	Amazon
Binary Trees	Check for Balanced Tree	Amazon Walmart Microsoft
Binary Trees	Transform to Sum Tree	Amazon FactSet Microsoft Samsung Walmart
Binary Trees	Check if Tree is Isomorphic	Amazon Microsoft
Binary Trees	Same Tree	Amazon Microsoft Flipkart
Binary Trees	Construct Binary Tree from Preorder and Inorder Traversal	Accolite Amazon Microsoft
Binary Trees	Height of Binary Tree	Amazon Cadence India CouponDunia D-E-Shaw FactSet FreeCharge MakeMyTrip
Binary Trees	Diameter of a Binary Tree	Amazon Microsoft OYO Rooms
Binary Trees	Top View of Binary Tree	Microsoft + Adobe + Expedia Group
Binary Trees	Bottom View of Binary Tree	DE Shaw India
Binary Trees	Diagonal Traversal of Binary Tree	Amazon Microsoft
Binary Trees	Boundary Traversal of binary tree	Accolite Amazon FactSet Hike Kritikal Solutions
Binary Trees	Construct Binary Tree from String with Brackets	Microsoft Morgan Stanley OYO Rooms Payu Samsung Snapdeal Flipkart
Binary Trees	Minimum swap required to convert binary tree to binary search tree	Adobe Amazon
Binary Trees	Duplicate subtree in Binary Tree	Google
Binary Trees	Check if a given graph is tree or not	Microsoft Amazon
Binary Trees	Lowest Common Ancestor in a Binary Tree	Accolite Amazon American Express Cisco Expedia Flipkart MakeMyTrip Microsoft OYO Room
Binary Trees	Min distance between two given nodes of a Binary Tree	Amazon Linkedin MakeMyTrip Ola Cabs Qualcomm Samsung
Binary Trees	Duplicate Subtrees	Ola
Binary Trees	Kth ancestor of a node in binary tree	Josh Technology Group
Binary Trees	Binary Tree Maximum Path Sum	Samsung + Facebook
Binary Trees	Serialize and Deserialize Binary Tree	Flipkart InMobi Linkedin MAQ Software Microsoft Paytm Quikr Yahoo
Binary Trees	Binary Tree to DLL	Accolite Amazon Goldman Sachs Microsoft Morgan Stanley Salesforce Snapdeal
Binary Trees	Print all k-sum paths in a binary tree	Accolite Amazon Goldman Sachs
Binary Search Trees	Lowest Common Ancestor of a Binary Search Tree	Accolite Amazon Flipkart MAQ Software Microsoft Samsung Synopsys
Binary Search Trees	Binary Search Tree	Set 1 (Search and Insertion)	Accolite Amazon Microsoft Paytm Samsung
Binary Search Trees	Minimum element in BST	Microsoft
Binary Search Trees	Predecessor and Successor	Google + Adobe + Goladman Sachs + Direct
Binary Search Trees	Check whether BST contains Dead End	Walmart
Binary Search Trees	Binary Tree to BST	HSBC
Binary Search Trees	Kth largest element in BST	Accolite Amazon Samsung SAP Labs Microsoft
Binary Search Trees	Validate Binary Search Tree	OYO Rooms Qualcomm Samsung Snapdeal VMWare Walmart Wooker Amazon Facebook
Binary Search Trees	Kth Smallest Element in a BST	Accolite Amazon Google
Binary Search Trees	Delete Node in a BST	Adobe Barclays
Binary Search Trees	Flatten BST to sorted list	Microsoft
Binary Search Trees	Preorder to Postorder	Amazon Linkedin Flipkart
Binary Search Trees	Count BST nodes that lie in a given range	D-E-Shaw Google
Binary Search Trees	Populate Inorder Successor for all Nodes	Sap Labs
Binary Search Trees	Convert Normal BST to Balanced BST	Paytm
Binary Search Trees	Merge two BSTs	DE Shaw India
Binary Search Trees	Given n appointments, find all conflicting appointments	Samsung
Binary Search Trees	Replace every element	Samsung
Binary Search Trees	Construct BST from given preorder traversal	Adobe Morgan Stanley Microsoft
Binary Search Trees	Find median of BST in O(n) time and O(1) space	Amazon
Binary Search Trees	Largest BST in a Binary Tree	Amazon D-E-Shaw Samsung Microsoft Flipkart	Important
Heaps & Hashing	Choose k array elements such that difference of maximum and minimum is minimized	
Heaps & Hashing	Heap Sort	Adobe
Heaps & Hashing	Top K Frequent Elements	Amazon Microsoft
Heaps & Hashing	k largest elements in an array	Amazon Walmart Adobe
Heaps & Hashing	Next Greater Element	Amazon + Microsoft + Flipkart + Adobe
Heaps & Hashing	K'th Smallest/Largest Element in Unsorted Array	ABCO Accolite Amazon Cisco Hike Microsoft Snapdeal VMWare Google Adobe
Heaps & Hashing	Find the maximum repeating number in O(n) time and O(1) extra space	Accolite Amazon
Heaps & Hashing	K-th smallest element after removing some integers from natural numbers	ABCO Accolite Amazon Cisco Hike Microsoft Snapdeal VMWare Google Adobe
Heaps & Hashing	Find k closest elements to a given value	Amazon OYO Rooms
Heaps & Hashing	K'th largest element in a stream	Amazon Cisco Hike OYO Rooms Walmart Microsoft Flipkart
Heaps & Hashing	Connect Ropes	Amazoon + Oyo + Goldman Sachs
Heaps & Hashing	Cuckoo Hashing	Amaxon
Heaps & Hashing	Itinerary from a List of Tickets	Microsoft + Ola + eBay
Heaps & Hashing	Largest Subarray with 0 Sum	Amazon MakeMyTrip Microsoft
Heaps & Hashing	Count distinct elements in every window of size k	Accolite Amazon Microsoft
Heaps & Hashing	Group Shifted Strings	Oracle
Heaps & Hashing	Merge K Sorted lists	Microsoft + Ola + eBay
Heaps & Hashing	Find Median from Data Stream	Adobe Amazon Apple Belzabar D-E-Shaw Facebook Flipkart Google Intuit Microsoft Morgan Stanley Ola Cabs Oracle Samsung SAP Labs Yahoo
Heaps & Hashing	Sliding Window Maximum	Amazon Directi Flipkart Microsoft Google
Heaps & Hashing	Find the smallest positive number	Accolite Amazon Samsung Snapdeal
Heaps & Hashing	Find Surpasser Count of each element in array	Amazon Morgan Stanley Ola Cabs SAP Labs
Heaps & Hashing	Tournament Tree and Binary Heap	Amazon Ola Cabs Samsung Synopsys Walmart Microsoft
Heaps & Hashing	Check for palindrome	Amazon Cisco D-E-Shaw Facebook FactSet Morgan Stanley Paytm Zoho
Heaps & Hashing	Length of the largest subarray with contiguous elements	Amazon Intuit Microsoft
Heaps & Hashing	Palindrome Substring Queries	Amazon Morgan Stanley Ola Cabs SAP Labs
Heaps & Hashing	Subarray distinct elements	Microsoft + Ola + eBay
Heaps & Hashing	Find the recurring function	MAQ Software
Heaps & Hashing	K maximum sum combinations from two arrays	Amazon
Graphs	BFS	Samsung + Delhivery + SAP Labs
Graphs	DFS	Samsung + Intuit + Goldman Sachs
Graphs	Flood Fill Algorithm	Google + Adobe + Apple
Graphs	Number of Triangles	IBM
Graphs	Detect cycle in a graph	Lenksart
Graphs	Detect cycle in an undirected graph	Samsung
Graphs	Rat in a Maze Problem	Sharechat + Directi
Graphs	Steps by Knight	Samsung
Graphs	Clone graph	Google + MAQ Software + Apple + Facebook
Graphs	Number of Operations to Make Network Connected	Samsung
Graphs	Dijkstra's shortest path algorithm	Amazon
Graphs	Topological Sort	Amazon + Google + Flipkart + Oyo + Fipkart + Samsung
Graphs	Oliver and the Game	Sharechat + Directi
Graphs	Minimum time taken by each job to be completed given by a Directed Acyclic Graph	Amazon
Graphs	Find whether it is possible to finish all tasks or not from given dependencies	Directi + Sharechat
Graphs	Find the number of islands	Razorpay
Graphs	Prim's Algo	Visa
Graphs	Negative Weighted Cycle	Amazon
Graphs	Floyd Warshall	Google + Uber

Category	Problem	Companies		
Graphs	Graph Coloring	Morgan Stanley		
Graphs	Snakes and Ladders	Goldman Sachs +Makemytrip		
Graphs	Kosaraju's Theorem	Paytm		
Graphs	Journey to moon	Lenksart + Payload		
Graphs	Vertex Cover	Intuit		
Graphs	M Coloring Problem	Uber		
Graphs	Cheapest Flights Within K Stops	Uber + Paypal		
Graphs	Find if there is a path of more than k length from a source	Cisco + Intuit		
Graphs	Bellman Ford	Sharechat + Directi		
Graphs	Bipartitie Graph	Microsoft Flipkart		
Graphs	Word-Ladder	Microsoft		
Graphs	Allen Dictionary	Samsung		
Graphs	Kruskals MST	Amazon Cisco Samsung	Important	
Graphs	Total number spanning trees graph	Amazon Cisco Samsung Microsoft Flipkart		
Graphs	Travelling Salesman	Google + Microsoft + Opera	Important	
Graphs	Find longest path directed acyclic graph	Google		
Graphs	Two Clique Problem	Microsoft		
Graphs	Minimise the cash flow	Intuit + Uber		
Graphs	Chinese postman	Intuit		
Graphs	Water Jug	Intuit + Uber		
Graphs	Water Jug 2	MakeMyTrip MAQ Software		
Tries	Construct a trie from scratch	Accolite Amazon D-E-Shaw FactSet Microsoft		
Tries	Print unique rows in a given boolean matrix	Amazon Zoho		
Tries	Word Break Problem	(Trie solution)	Amazon Google Hike IBM MAQ Software Microsoft Walmart Zoho		
Tries	Given a sequence of words, print all anagrams together	Amazon D-E-Shaw Goldman Sachs Morgan Stanley Snapdeal Microsoft		
Tries	Find shortest unique prefix for every word in a given list	Microsoft Google		
Tries	Implement a Phone Directory	Amazon + Microsoft + Snapdeal		
DP	Knapsack with Duplicate Items	Amazon		
DP	BBT counter	Microsoft		
DP	Reach a given score	Samsung		
DP	Maximum difference of zeros and ones in binary string	Ola		
DP	Climbing Stairs	Intuit		
DP	Permutation Coefficient	Amazon		
DP	Longest Repeating Subsequence	Google + Amazon		
DP	Pairs with specific difference	Ola		
DP	Longest subsequence-1	Amazon		
DP	Coin Change	Microsoft+ Samsung + Barclays + Apple + Adobe		
DP	LIS	Amazon + Google + Facebook + Fidelity International		
DP	Longest Common Subsequence	Siemens + Amazon + Google		
DP	Word Break	Amazon + Google + Microsoft + Walmart + Apple + IBM		
DP	Combination Sum IV	Adobe Amazon Microsoft		
DP	House Robber	Apple + Uber		
DP	Houe Robber 2	Arrays Dynamic Programming		
DP	Decode Ways	Adobe + Uber		
DP	Unique Paths	Google + Microsoft		
DP	Jumps Game	Facebook Amazon Microsoft Google		
DP	Knapsack Problem	Amazon Directi Flipkart GreyOrange Microsoft Mobicip Morgan Stanley Oracle Payu Snapdeal Visa		
DP	nCr	Google		
DP	Catalan Number	Amazon + Google		
DP	Edit Distance	Google + Goldman Sachs + Citrix		
DP	Subset Sum	Amazon + Google		
DP	Gold mine	Samsung		
DP	Assembly Line Scheduling	Goldman Sachs		
DP	Maximize The Cut Segments	Amazon OYO Rooms Microsoft		
DP	Maximum sum increasing subsequence	Amazon Morgan Stanley Microsoft		
DP	Count all subsequences having product less than K	Goldman Sachs		
DP	Maximum sum increasing subsequence	Amazon Morgan Stanley Microsoft		
DP	Egg dropping puzzle	Amazon D-E-Shaw Goldman Sachs Google Hike MakeMyTrip MAQ Software Myntra Nearbuy Opera Oracle Philips Samsung Service Now Unisys VMWare Microsoft		
DP	Max length chain	Amazon Microsoft		
DP	Largest Square in Matrix	Amazon Samsung		
DP	Maximum Path Sum	Amazon + Microsoft + Oyo + Directi		
DP	Minimum Number of Jumps	Adobe Amazon Housing.com Moonfrog Labs Walmart Microsoft Google Flipkart		
DP	Minimum removals from array to make max – min <= K	Amazon		
DP	Longest Common Substring	Webarch Club		
DP	Partition Equal Subset Sum	Amazon + Accolite + Traveloca + Adobe		
DP	Longest Palindromic Subsequnce	Amazon Google		
DP	Count Palindromic Subsequences	Myntra		
DP	Longest Palindromic Substring	Amazon + Microsoft + Samsung + Visa		
DP	Longest Alternating Sequence	Ola		
DP	Weighted Job Scheduling	Intuit		
DP	Coin Game	Salesforce		
DP	Coin Game Winner	Ola		
DP	Optimal Strategy for a game	Google + IBM		
DP	Word Wrap	Microsoft		
DP	Mobile numeric keypad	Amazon Microsoft		
DP	Maximum Length of Pair Chain	Amazon Microsoft		
DP	Matrix Chain Multiplication	Walmart + Flipkart		
DP	Maximum profit by buying and selling a share at most twice	Accolite Amazon Microsoft		
DP	Optimal BST	Google		
DP	Largest Submatrix with sum 0	Amazon MakeMyTrip Microsoft		
DP	Largest area rectangular sub-matrix with equal number of 1's and 0's	Amazon Directi Intuit MakeMyTrip Microsoft Samsung Google Flipkart		
Bit Manipulation	Count set bits in an integer	Adobe Apple		
Bit Manipulation	Find the two non-repeating elements in an array of repeating elements	Accolite Amazon FactSet Google MakeMyTrip Microsoft Qualcomm Samsung		
Bit Manipulation	Program to find whether a no is power of two	Adobe		
Bit Manipulation	Find position of the only set bit	Microsoft		
Bit Manipulation	Count number of bits to be flipped to convert A to B	Maq Software		
Bit Manipulation	Count total set bits in all numbers from 1 to n	Microsoft		
Bit Manipulation	Copy set bits in a range	Facebook		
Bit Manipulation	Calculate square of a number without using *, / and pow()	Amazon		
Bit Manipulation	Divide two integers without using multiplication, division and mod operator	Microsoft		
Bit Manipulation	Power Set	Google + Adobe + Paytm		
Segment Trees	Range Sum Query - Immutable			
Segment Trees	Range Minimum Query	Google Interview Qs		
Segment Trees	Range Sum Query - Mutable	Alibaba		
Segment Trees	Create Sorted Array through Instructions	Samsung + Accolite		
Segment Trees	Count of Range Sum	Walmart		
Segment Trees	Count of Smaller Numbers After Self	Codenation Google		