

8. [C++ Program to Sort the 2D Array Across Rows](#)
9. [C++ Program to Sort the Elements of an Array in Descending Order](#)
10. [C++ Program to Sort the Elements of an Array in Ascending Order](#)

C++ Structures Programs

1. [C++ Program to Pass or Return a Structure to/from a Function](#)
2. [C++ Program to Store Information of a Student in a Structure](#)
3. [C++ Program For Structure Sorting \(By Multiple Rules\)](#)

C++ Class and Object Programs

1. [C++ Program to Create a Class and Object](#)
2. [C++ Program to Show Encapsulation](#)
3. [C++ Program to Show Inheritance](#)
4. [C++ Program to Show Abstraction in Class](#)
5. [C++ Program to Show Data Hiding in Class](#)
6. [C++ Program to Show Polymorphism in Class](#)
7. [C++ Program to Show Function Overloading](#)
8. [C++ Program to Show Function Overriding](#)
9. [C++ Program to Show Usage of Access Modifier](#)
10. [C++ Program to Show Use of This Keyword in Class](#)
11. [C++ Program to Show Usage of Static keyword](#)
12. [C++ Program For Friend Functions](#)
13. [C++ Program For Virtual Destructor](#)
14. [C++ Program to Create Abstract Class](#)
15. [C++ Program to Create Singleton Class](#)
16. [C++ Program to Create an Interface](#)
17. [C++ Program to Overload Increment ++ and Decrement](#)
18. [C++ Program to Add Two Complex Numbers](#)

C++ File Handling Programs

1. [C++ Program to Create a New File](#)
2. [C++ Program to Create a Temporary File](#)
3. [C++ Program to Write Into a File](#)
4. [C++ Program to Rename a File](#)
5. [C++ Program to Make a File Read-Only](#)
6. [C++ Program to Compare Paths of Two Files](#)
7. [C++ Program to Copy one File into Another File](#)
8. [C++ Program to Append the Content of One Text File to Another](#)
9. [C++ Program to Get the List of Files in a Directory](#)
10. [C++ Program to Append a String in an Existing File](#)
11. [C++ Program to Read Content From One File and Write it into Another File](#)

C++ Exception Handling Programs

1. [C++ Program to Show Runtime Exceptions](#)
2. [C++ Program to Show Types of Errors](#)
3. [C++ Program to Handle the Exception Methods](#)
4. [C++ Program to Handle the Exception Methods](#)
5. [C++ Program to Handle the Checked Exceptions](#)

6. [C++ Program to Handle the Unchecked Exceptions](#)
7. [C++ Program to Handle Divide By Zero and Multiple Exceptions](#)
8. [C++ Program to Show Unreachable Code Error](#)
9. [C++ Program to Show Thread Interface and Memory Consistency Errors](#)

C++ STL Programs

1. [C++ Program to Sort an Array Using STL](#)
2. [C++ Program To Initialize A Vector](#)
3. [C++ Program To Copy A Vector Using STL](#)
4. [C++ Program For Merge Operations Using STL](#)
5. [C++ Program To Show transform\(\) Using STL](#)
6. [C++ Program For Deque Using STL](#)
7. [C++ Program For Priority Queue Using STL](#)
8. [C++ Program For Map Using STL](#)
9. [C++ Program For Pair Using STL](#)
10. [C++ Program For Multiset using STL](#)
11. [C++ Program To Reverse A Vector Using STL](#)
12. [C++ Program To Reverse An Array Using STL](#)
13. [C++ Program For Stack Of Pair Using STL](#)
14. [C++ Program To Find Permutations Of A Given String Using STL](#)
15. [C++ Program To Find All Permutations of an Array Using STL.](#)
16. [C++ Program To Find Maximum And Minimum Elements In a Set Using STL](#)
17. [C++ Program To Insert And Delete Elements in a Set Using STL](#)
18. [C++ Program To Find Sum Of Elements Of a Vector Using STL](#)
19. [C++ Program To Implement Different Methods To Copy in STL](#)
20. [C++ Program To Implement Binary Search Functions Using STL](#)
21. [C++ Program To Check If Two Vectors Contain the Same Elements Or Not](#)

C++ Date and Time Programs

1. [C++ Program to Display Dates of Calendar Year in Different Formats](#)
2. [C++ Program to Display Current Date and Time](#)
3. [C++ Program to Convert the Local Time to GMT](#)

C++ Miscellaneous Programs

1. [C++ Program to Find Quotient and Remainder](#)
2. [C++ Program for sizeof\(\) Operator](#)
3. [C++ Program to Find Initials of a Name](#)
4. [C++ Program to Find Power Without Using * and / Operators](#)
5. [C++ Program to Find the Roots of the Quadratic Equation](#)
6. [Generate Random Double Numbers in C++](#)
7. [How to Hide and Show a Console Window in C++?](#)
8. [How to Run a C++ Program Without Namespace?](#)
9. [Build a custom Map using a Header File in C++](#)
10. [C++ Program for Number of Unique Triplets Whose XOR is Zero](#)

11. Array C/C++ Programs

12. C Program to find sum of elements in a given array
13. C program to find largest element in an array
14. Recursive C program to linearly search an element in a given array
15. C program to multiply two matrices
16. C/C++ Program for Given an array A[] and a number x, check for pair in A[] with sum as x
17. C/C++ Program for Majority Element
18. C/C++ Program for Find the Number Occurring Odd Number of Times
19. C/C++ Program for Largest Sum Contiguous Subarray
20. C/C++ Program for Find the Missing Number
21. C/C++ Program for Search an element in a sorted and pivoted array
22. C/C++ Program for Merge an array of size n into another array of size m+n
23. C/C++ Program for Median of two sorted arrays
24. C/C++ Program for Write a program to reverse an array
25. C/C++ Program for Program for array rotation
26. C/C++ Program for Reversal algorithm for array rotation
27. C/C++ Program for Block swap algorithm for array rotation
28. C/C++ Program for Maximum sum such that no two elements are adjacent
29. C/C++ Program for Leaders in an array
30. C/C++ Program for Sort elements by frequency | Set 1
31. C/C++ Program for Count Inversions in an array
32. C/C++ Program for Two elements whose sum is closest to zero
33. C/C++ Program for Find the smallest and second smallest element in an array
34. C/C++ Program for Check for Majority Element in a sorted array
35. C/C++ Program for Maximum and minimum of an array using minimum number of comparisons
36. C/C++ Program for Segregate 0s and 1s in an array
37. C/C++ Program for k largest(or smallest) elements in an array | added Min Heap method
38. C/C++ Program for Maximum size square sub-matrix with all 1s
39. C/C++ Program for Maximum difference between two elements such that larger element appears after the smaller number
40. C/C++ Program for Union and Intersection of two sorted arrays
41. C/C++ Program for Floor and Ceiling in a sorted array
42. C/C++ Program for A Product Array Puzzle
43. C/C++ Program for Segregate Even and Odd numbers
44. C/C++ Program for Find the two repeating elements in a given array
45. C/C++ Program for Sort an array of 0s, 1s and 2s
46. C/C++ Program for Find the Minimum length Unsorted Subarray, sorting which makes the complete array sorted
47. C/C++ Program for Find duplicates in O(n) time and O(1) extra space
48. C/C++ Program for Equilibrium index of an array
49. C/C++ Program for Which sorting algorithm makes minimum number of memory writes?
50. C/C++ Program for Turn an image by 90 degree
51. C/C++ Program for Search in a row wise and column wise sorted matrix
52. C/C++ Program for Next Greater Element
53. C/C++ Program for Check if array elements are consecutive | Added Method 3
54. C/C++ Program for Find the smallest missing number

55. C/C++ Program for Count the number of occurrences in a sorted array
56. C/C++ Program for Binary Search
57. C/C++ Program for Selection Sort
58. C/C++ Program for Bubble Sort
59. C/C++ Program for Insertion Sort
60. C/C++ Program for Merge Sort
61. C/C++ Program for Heap Sort
62. C/C++ Program for QuickSort
63. C/C++ Program for Given an array arr[], find the maximum j - i such that arr[j] > arr[i]
64. C/C++ Program for Maximum of all subarrays of size k (Added a O(n) method)
65. C/C++ Program for Find whether an array is subset of another array | Added Method 3
66. C/C++ Program for Find the minimum distance between two numbers
67. C/C++ Program for Find the repeating and the missing | Added 3 new methods
68. C/C++ Program for Print a given matrix in spiral form
69. C/C++ Program for A Boolean Matrix Question
70. C/C++ Program for Median in a stream of integers (running integers)
71. C/C++ Program for Find a Fixed Point in a given array
72. C/C++ Program for Maximum Length Bitonic Subarray
73. C/C++ Program for Find the maximum element in an array which is first increasing and then decreasing
74. C/C++ Program for Count smaller elements on right side
75. C/C++ Program for Minimum number of jumps to reach end
76. C/C++ Program for Implement two stacks in an array
77. C/C++ Program for Find subarray with given sum
78. C/C++ Program for Dynamic Programming | Set 14 (Maximum Sum Increasing Subsequence)
79. C/C++ Program for Longest Monotonically Increasing Subsequence Size (N log N)
80. C/C++ Program for Find a triplet that sum to a given value
81. C/C++ Program for Find the smallest positive number missing from an unsorted array
82. C/C++ Program for Find the two numbers with odd occurrences in an unsorted array
83. C/C++ Program for The Celebrity Problem
84. C/C++ Program for Dynamic Programming | Set 15 (Longest Bitonic Subsequence)
85. C/C++ Program for Find a sorted subsequence of size 3 in linear time
86. C/C++ Program for Largest subarray with equal number of 0s and 1s
87. C/C++ Program for Dynamic Programming | Set 18 (Partition problem)
88. C/C++ Program for Maximum Product Subarray
89. C/C++ Program for Find a pair with the given difference
90. C/C++ Program for Replace every element with the next greatest
91. C/C++ Program for Dynamic Programming | Set 20 (Maximum Length Chain of Pairs)
92. C/C++ Program for Find four elements that sum to a given value | Set 1 (n^3 solution)
93. C/C++ Program for Find four elements that sum to a given value | Set 2 ($O(n^2 \log n)$ Solution)
94. C/C++ Program for Sort a nearly sorted (or K sorted) array

- Stack
 - Question 41: Implement a stack using array.
 - Question 42: Implement a stack using Linked List.
 - Question 43: Implement a stack using two queues.
 - Question 44 : Sort an stack using another stack
- Queue
 - Question 45: Implement Queue using Array in java.
 - Question 46: Implement a stack using two queues .
- Linked List
 - Question 47 : Implement singly linked list in java.
 - Question 48: How to reverse linked list in java.
 - Question 49: How to find middle element of linked list.
 - Question 50 : How to find nth element from end of linked list .
 - Question 51 : How to detect a loop in linked list. If linked list has loop, find the start node for the loop.
 - Question 52: How to check if linked list is palindrome or not?
 - Question 53 : Find intersection of two linked lists?
 - Question 54 : How to reverse a linked list in pairs?
 - Question 55 : Implement Doubly linked list in java?
- Binary Tree
 - Question 56 : How can you traverse binary tree?
 - Question 57 : Write an algorithm to do level order traversal of binary tree?
 - Question 58 : Write an algorithm to do spiral order traversal of binary tree?
 - Question 59 : How can you print leaf nodes of binary tree?
 - Question 60 : How to count leaf nodes of binary tree.
 - Question 61 : How to print all paths from root to leaf in binary tree.
 - Question 62 : How to find level of node in binary tree
 - Question 63 : How to find maximum element in binary tree.

- [Question 64 : How to find lowest common ancestor\(LCA\) in binary tree.](#)
- [Question 65 : How to do boundary traversal of binary tree.](#)
- [Question 66 : How to print vertical sum of binary tree?](#)
- [Question 67 : Count subtrees with Sum equal to target in binary tree?](#)
- [Binary Search tree](#)
 - [Question 68 : What is binary search tree?](#)
 - [Question 69 : Can you write algorithm to insert a node in binary search tree.](#)
 - [Question 70 : Can you write algorithm to delete a node in binary search tree.](#)
 - [Question 71 : How can you find minimum and maximum elements in binary search tree?](#)
 - [Question 72 : How to find lowest common ancestor\(LCA\) in binary search tree.](#)
 - [Question 73 : Find inorder successor in a Binary search Tree](#)
 - [Question 74 : Convert sorted array to balanced BST](#)
 - [Question 75 : Convert sorted Linked List to balanced BST](#)
 - [Question 76 : Check if a binary tree is binary search tree or not in java](#)
- [Sorting](#)
 - [Question 77 : Write an algorithm to implement bubble sort?](#)
 - [Question 78 : Write an algorithm to implement insertion sort sort?](#)
 - [Question 79 : Write an algorithm to implement selection sort sort?](#)
 - [Question 80 : Can you write algorithm for merge sort and also do you know complexity of merge sort?](#)
 - [Question 81 : Do you know how to implement Heap sort?](#)
 - [Question 82 : Implement quick sort in java?](#)
 - [Question 83 : Implement shell sort in java?](#)
 - [Question 84 : Implement Counting sort in java?](#)

- [Question 85 : What is binary search? Can you write an algorithm to find an element in sorted array using binary search?](#)
- [Graph](#)
 - [Question 86 : Write algorithm to do depth first search in a graph.](#)
 - [Question 87 : Write algorithm to do breadth first search in a graph.](#)
 - [Question 88 : Explain Dijkstra algorithm from source to all other vertices.](#)
 - [Question 89 : Explain Bellman Ford algorithm to find shortest distance](#)
 - [Question 90 : Explain Kruskal's algorithm for finding minimum spanning tree](#)
- [Dynamic Programming](#)
 - [Question 91 : Given two String, find longest common substring.](#)
 - [Question 92 : Given two Strings A and B. Find the length of the Longest Common Subsequence \(LCS\) of the given Strings.](#)
 - [Question 93 : Given a matrix, we need to count all paths from top left to bottom right of MxN matrix. You can either move down or right.](#)
 - [Question 94 : Edit Distance Problem in java](#)
 - [Question 95: Coin change problem in java](#)
 - [Question 96 : Minimum number of jumps to reach last index](#)
- [Miscellaneous](#)
 - [Question 97 : What is an algorithm and how to calculate complexity of algorithms.](#)
 - [Question 98 : Implement trie data structure in java.](#)
 - [Question 99 : Count Factorial Trailing Zeroes in java.](#)
 - [Question 100 : Largest Rectangular Area in a Histogram.](#)
 - [Question 101 : Check for balanced parentheses in an expression in java.](#)
 - [Question 102 : What is Memoization.](#)

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	Amazon

	Given Array of Size n	
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
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
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

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	Pair with given difference	Amazon Visa
Searching & Sorting	majority element	Amazon+ Google
Searching & Sorting	count triplets with sum smaller than 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	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	Sudoku	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 cryptarithmic 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	<u>Microsoft Amazon MakeMyTrip</u>
Linked List	Multiply two numbers represented linked lists	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

Linked List	Quicksort on singly-linked list	Paytm
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
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	Amazon Microsoft Flipkart

	every window size in a given array	
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 + Goldman 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
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 Microsoft 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	Amazon + Oyo + Goldman Sachs
Heaps & Hashing	Cuckoo Hashing	Amazon
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
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	Bipartite Graph	Microsoft Flipkart
Graphs	Word-Ladder	Microsoft
Graphs	Allen Dictionary	Samsung
Graphs	Kruskals MST	Amazon Cisco Samsung
Graphs	Total number spanning trees graph	Amazon Cisco Samsung Microsoft Flipkart
Graphs	Travelling Salesman	Google + Microsoft + Opera
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	House 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 $\max - \min \leq K$	Amazon
DP	Longest Common Substring	Webarch Club
DP	Partition Equal Subset Sum	Amazon + Accolite + Traveloca + Adobe
DP	Longest Palindromic Subsequence	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

Java Singly Linked List Programs

- 1) Singly linked list Examples in Java
 - 2) Java Program to create and display a singly linked list
 - 3) Java program to create a singly linked list of n nodes and count the number of nodes
 - 4) Java program to create a singly linked list of n nodes and display it in reverse order
 - 5) Java program to delete a node from the beginning of the singly linked list
 - 6) Java program to delete a node from the middle of the singly linked list
 - 7) Java program to delete a node from the end of the singly linked list
 - 8) Java program to determine whether a singly linked list is the palindrome
 - 9) Java program to find the maximum and minimum value node from a linked list
 - 10) Java Program to insert a new node at the middle of the singly linked list
 - 11) Java program to insert a new node at the beginning of the singly linked list
 - 12) Java program to insert a new node at the end of the singly linked list
 - 13) Java program to remove duplicate elements from a singly linked list
 - 14) Java Program to search an element in a singly linked list
-

Java Circular Linked List Programs

- 1) Java program to create and display a Circular Linked List
- 2) Java program to create a Circular Linked List of N nodes and count the number of nodes
- 3) Java program to create a Circular Linked List of n nodes and display it in reverse order
- 4) Java program to delete a node from the beginning of the Circular Linked List

- 5) Java program to delete a node from the end of the Circular Linked List
 - 6) Java program to delete a node from the middle of the Circular Linked List
 - 7) Java program to find the maximum and minimum value node from a circular linked list
 - 8) Java program to insert a new node at the beginning of the Circular Linked List
 - 9) Java program to insert a new node at the end of the Circular Linked List
 - 10) Java program to insert a new node at the middle of the Circular Linked List
 - 11) Java program to remove duplicate elements from a Circular Linked List
 - 12) Java program to search an element in a Circular Linked List
 - 13) Java program to sort the elements of the Circular Linked List
-

Java Doubly Linked List Programs

- 1) Java program to convert a given binary tree to doubly linked list
- 2) Java program to create a doubly linked list from a ternary tree
- 3) Java program to create a doubly linked list of n nodes and count the number of nodes
- 4) Java program to create a doubly linked list of n nodes and display it in reverse order
- 5) Java program to create and display a doubly linked list
- 6) Java program to delete a new node from the beginning of the doubly linked list
- 7) Java program to delete a new node from the end of the doubly linked list
- 8) Java program to delete a new node from the middle of the doubly linked list
- 9) Java program to find the maximum and minimum value node from a doubly linked list

- 10) Java program to insert a new node at the beginning of the Doubly Linked list
 - 10) Java program to insert a new node at the end of the Doubly Linked List
 - 12) Java program to insert a new node at the middle of the Doubly Linked List
 - 13) Java program to remove duplicate elements from a Doubly Linked List
 - 14) Java program to rotate doubly linked list by N nodes
 - 15) Java program to search an element in a doubly linked list
 - 16) Java program to sort the elements of the doubly linked list
-

Java Tree Programs

- 1) Java Program to calculate the Difference between the Sum of the Odd Level and the Even Level Nodes of a Binary Tree
- 2) Java program to construct a Binary Search Tree and perform deletion and In-order traversal
- 3) Java program to convert Binary Tree to Binary Search Tree
- 4) Java program to determine whether all leaves are at same level
- 5) Java program to determine whether two trees are identical
- 6) Java program to find maximum width of a binary tree
- 7) Java program to find the largest element in a Binary Tree
- 8) Java program to find the maximum depth or height of a tree
- 9) Java program to find the nodes which are at the maximum distance in a Binary Tree
- 10) Java program to find the smallest element in a tree
- 11) Java program to find the sum of all the nodes of a binary tree
- 12) Java program to find the total number of possible Binary Search Trees with N keys

13) Java program to implement Binary Tree using the Linked List

14) Java program to search a node in a Binary Tree

,

Java Array Programs: Basic Array Questions

- [Java Array Program to Find the Largest Element in an Array](#)
- [Java Array Program to Print a 2D Array](#)
- [Java Array Program to Copy All the Elements of One Array to Another Array](#)
- [Java Array Program to Check Whether Two Matrices Are Equal or Not](#)
- [Java Array Program to Add Two Matrices](#)
- [Java Array Program to Find the Transpose](#)
- [Java Array Program to Find the Determinant](#)
- [Java Array Program to Find the Normal and Trace](#)
- [Java Array Program For Array Rotation](#)
- [Java Array Program to Check if Two Arrays Are Equal or Not](#)
- [Java Array Program to Compute the Sum of Diagonals of a Matrix](#)

Java Array Programs: Advance Array Questions

- [Java Array Program to Print Boundary Elements of a Matrix](#)
- [Java Array Program to Rotate Matrix Elements](#)
- [Java Array Program to Remove Duplicate Elements From an Array](#)
- [Java Array Program to Remove All Occurrences of an Element in an Array](#)
- [Java Array Program to Merge Two Arrays](#)
- [Java Array Program to Find Common Array Elements](#)
- [Java Array Program to Interchange Elements of First and Last in a Matrix Across Rows](#)
- [Java Array Program to Interchange Elements of First and Last in a Matrix Across Columns](#)

Java Array Programs: Searching and Sorting Questions

- [Java Array Program to Search an Element in an Array](#)
- [Java Array Program to Sort an Array](#)
- [Java Array Program to Sort the 2D Array Across Columns](#)
- [Java Array Program for Bubble Sort](#)
- [Java Array Program for Insertion Sort](#)
- [Java Array Program for Selection Sort](#)
- [Java Array Program for Merge Sort](#)
- [Java Array Program for Quick Sort](#)
- [Java Array Program for Linear Search](#)
- [Java Array Program for Binary Search](#)
- [Java Array Program to Sort the Elements of an Array in Descending Order](#)
- [Java Array Program to Sort the Elements of an Array in Ascending Order](#)

Level 1

Problems	Solve
<u>Find a peak element which is not smaller than its neighbors</u>	<u>Solve</u>
<u>Find the minimum and maximum element in an array</u>	<u>Solve</u>
<u>Write a program to reverse the array</u>	<u>Solve</u>
<u>Write a program to sort the given array</u>	<u>Solve</u>
<u>Find the Kth largest and Kth smallest number in an array</u>	<u>Solve</u>
<u>Find the occurrence of an integer in the array</u>	<u>Solve</u>
<u>Sort the array of 0s, 1s, and 2s</u>	<u>Solve</u>
<u>Subarray with given Sum</u>	<u>Solve</u>
<u>Move all the negative elements to one side of the array</u>	<u>Solve</u>
<u>Find the Union and Intersection of the two sorted arrays</u>	<u>Solve</u>

Level 2

Problems	Solve
<u>Write a program to cyclically rotate an array by one</u>	<u>Solve</u>
<u>Find the missing integer</u>	<u>Solve</u>
<u>Count Pairs with the given sum</u>	<u>Solve</u>
<u>Find duplicates in an array</u>	<u>Solve</u>

Problems	Solve
<u>Sort an Array using the Quicksort algorithm</u>	<u>Solve</u>
<u>Find common elements in three sorted arrays</u>	<u>Solve</u>
<u>Find the first repeating element in an array of integers</u>	<u>Solve</u>
<u>Find the first non-repeating element in a given array of integers</u>	<u>Solve</u>
<u>Subarrays with equal 1s and 0s</u>	<u>Solve</u>
<u>Rearrange the array in alternating positive and negative items</u>	<u>Solve</u>
<u>Find if there is any subarray with a sum equal to zero</u>	<u>Solve</u>
<u>Find the Largest sum contiguous Subarray</u>	<u>Solve</u>
<u>Find the factorial of a large number</u>	<u>Solve</u>
<u>Find Maximum Product Subarray</u>	<u>Solve</u>
<u>Find the longest consecutive subsequence</u>	<u>Solve</u>
<u>Find the minimum element in a rotated and sorted array</u>	<u>Solve</u>
<u>Max sum in the configuration</u>	<u>Solve</u>
<u>Minimum Platforms</u>	<u>Solve</u>
<u>Minimize the maximum difference between the heights</u>	<u>Solve</u>

Problems	Solve
<u>Minimum number of jumps to reach the end</u>	<u>Solve</u>
<u>Stock Span problem</u>	<u>Solve</u>
<u>Find a triplet that sums to a given value</u>	<u>Solve</u>
<u>Smallest positive missing number</u>	<u>Solve</u>
<u>Find the row with a maximum number of 1's</u>	<u>Solve</u>
<u>Print the matrix in a Spiral manner</u>	<u>Solve</u>
<u>Find whether an array is a subset of another array</u>	<u>Solve</u>
<u>Implement two Stacks in an array</u>	<u>Solve</u>
<u>Majority Element</u>	<u>Solve</u>
<u>Wave Array</u>	<u>Solve</u>
<u>Trapping Rainwater</u>	<u>Solve</u>
Level 3	
Problems	Solve
<u>Maximum Index</u>	<u>Solve</u>
<u>Max sum path in two arrays</u>	<u>Solve</u>
<u>Find Missing And Repeating</u>	<u>Solve</u>
<u>Stock buy and sell Problem</u>	<u>Solve</u>
<u>Pair with the given sum in a sorted array</u>	<u>Solve</u>

Problems	Solve
<u>Chocolate Distribution Problem</u>	<u>Solve</u>
<u>Partition Equal Subset Sum</u>	<u>Solve</u>
<u>Smallest Positive integer that can't be represented as a sum</u>	<u>Solve</u>
<u>Coin Change Problem</u>	<u>Solve</u>
<u>Longest Alternating subsequence</u>	<u>Solve</u>

Related Articles:

- [Top 50 String Coding Problems for Interviews](#)
- [Top 50 Tree Coding Problems for Interviews](#)
- [Top 50 Graph Coding Problems for Interviews](#)
- [Top 50 Dynamic Programming Coding Problems for Interviews](#)
- [Top 50 Sorting Coding Problems for Interviews](#)

• Top 50 String Coding Problems for Interviews

• [Level 1](#)

Problems	Solve
<u>Reverse words in a given string</u>	<u>Solve</u>
<u>Longest Common Prefix</u>	<u>Solve</u>
<u>Roman Number to Integer</u>	<u>Solve</u>
<u>Integer to Roman</u>	<u>Solve</u>
<u>Closest Strings</u>	<u>Solve</u>
<u>Divisible by 7</u>	<u>Solve</u>
<u>Encrypt the String – II</u>	<u>Solve</u>

Problems	Solve
<u>Equal point in a string of brackets</u>	<u>Solve</u>
<u>Isomorphic Strings</u>	<u>Solve</u>
<u>Check if two strings are k-anagrams or not</u>	<u>Solve</u>
<u>Panagram Checking</u>	<u>Solve</u>
<u>Minimum Deletions</u>	<u>Solve</u>
<u>Number of Distinct Subsequences</u>	<u>Solve</u>
<u>Check if string is rotated by two places</u>	<u>Solve</u>
• <u>Level 2</u>	

Problems	Solve
<u>Implement Atoi</u>	<u>Solve</u>
<u>Validate an IP address</u>	<u>Solve</u>
<u>License Key Formatting</u>	<u>Solve</u>
<u>Find the largest word in dictionary</u>	<u>Solve</u>
<u>Equal 0,1, and 2</u>	<u>Solve</u>
<u>Find and replace in String</u>	
<u>Add Binary Strings</u>	<u>Solve</u>
<u>Sum of two large numbers</u>	<u>Solve</u>

Problems	Solve
<u>Multiply two strings</u>	<u>Solve</u>
<u>Look and say Pattern</u>	<u>Solve</u>
<u>Minimum times A has to be repeated to make B a Substring</u>	<u>Solve</u>
<u>Excel Sheet – I</u>	<u>Solve</u>
<u>Form a Palindrome</u>	<u>Solve</u>
<u>Find the N-th character</u>	<u>Solve</u>
<u>Next higher palindromic number using the same set of digits</u>	<u>Solve</u>
<u>Length of longest prefix suffix</u>	<u>Solve</u>
<u>Longest K unique characters substring</u>	<u>Solve</u>
<u>Smallest window in string containing all characters</u>	<u>Solve</u>
<u>Longest Palindromic Subsequence</u>	<u>Solve</u>
<u>Longest substring without repeating characters</u>	<u>Solve</u>
<u>Substrings of length k with k-1 distinct elements</u>	<u>Solve</u>
<u>Count number of substrings</u>	<u>Solve</u>
<u>Interleaved Strings</u>	<u>Solve</u>
<u>Print Anagrams together</u>	<u>Solve</u>

Problems	Solve
Rank the permutation	Solve
A Special Keyboard	Solve

- **Level 3**

Problems	Solve
Restrictive Candy Crush	Solve
Edit Distance	Solve
Search Pattern (KMP-Algorithm)	Solve
Search Pattern (Rabin-Karp Algorithm)	Solve
Search Pattern (Z-algorithm)	Solve
Shortest Common Supersequence	Solve
Number of words with K maximum distinct vowels	Solve
Longest substring to form a Palindrome	Solve
Longest Valid Parenthesis	Solve
Distinct Palindromic Substrings	Solve

Level 1

Problems	Practice
Find the Minimum and Maximum Element in an Array	Solve
Array Reverse	Solve
Write a Program to Cyclically Rotate an Array by One	Solve
Sort an Array	Solve
Find Duplicates in an Array	Solve
Find the Occurrence of an Integer in the Array	Solve
Sort the Array of 0s, 1s, and 2s	Solve
Move All the Negative Elements to One Side of the Array	Solve
Find the Row with a Maximum Number of 1's	Solve
Majority Element	Solve
Wave Array	Solve

Level 2

Problems	Practice
Find the Factorial of a Large Number	Solve
Find a Peak Element Which Is Not Smaller Than Its Neighbors	Solve
Find the Kth Largest and Kth Smallest Number in an Array	Solve
Subarray with Given Sum	Solve
Find Whether an Array is a Subset of Another Array	Solve
Find the Union and Intersection of Two Sorted Arrays	Solve
Find the Missing Integer	Solve
Count Pairs with the Given Sum	Solve
Sort an Array Using the Quicksort Algorithm	Solve
Find Common Elements in Three Sorted Arrays	Solve
Find the First Non-Repeating Element in a Given Array of Integers	Solve
Subarrays with Equal 1s and 0s	Solve

Problems	Practice
Rearrange the Array in Alternating Positive and Negative Items	Solve
Find if There is Any Subarray with a Sum Equal to Zero	Solve
Find the Largest Sum Contiguous Subarray	Solve
Find Maximum Product Subarray	Solve
Find the Longest Consecutive Subsequence	Solve
Find the Minimum Element in a Rotated and Sorted Array	Solve
Minimum Platforms	Solve
Minimize the Maximum Difference Between the Heights	Solve
Stock Span Problem	Solve
Find a Triplet That Sums to a Given Value	Solve
Smallest Positive Missing Number	Solve
Print the Matrix in a Spiral Manner	Solve
Implement Two Stacks in an Array	Solve

Problems	Practice
Maximum Index	Solve
Max Sum Path in Two Arrays	Solve
Find Missing And Repeating	Solve
Stock Buy and Sell Problem	Solve
Pair with the Given Sum in a Sorted Array	Solve
Chocolate Distribution Problem	Solve
Longest Alternating Subsequence	Solve

Level 3

Problems	Solve
Trapping Rainwater	Solve
Coin Change Problem	Solve
First missing positive number	Solve
Max Sum in the Configuration	Solve
Partition Equal Subset Sum	Solve
Smallest Positive Integer That Can't Be Represented as a Sum	Solve

Problems	Solve
Minimum Number of Jumps to Reach the End	Solve

Topic :

- [Arrays](#)
- [String](#)
- [Linked List](#)
- [Stack and Queue](#)
- [Tree and BST](#)
- [Heap](#)
- [Recursion](#)
- [Hashing](#)
- [Graph](#)
- [Greedy](#)
- [Dynamic Programming](#)
- [Divide and Conquer](#)
- [Backtracking](#)
- [Bit Magic](#)

For preparing for interviews with companies like Amazon or Microsoft, the [GeeksforGeeks Online Practice Platform](#) offers curated problem sets that mimic the challenges faced in these interviews.

Arrays

1. [Subarray with given sum](#)
2. [Count the triplets](#)
3. [Kadane's Algorithm](#)
4. [Missing number in array](#)
5. [Merge two sorted arrays](#)
6. [Rearrange array alternatively](#)
7. [Number of pairs](#)

8. [Inversion of Array](#)
9. [Sort an array of 0s, 1s and 2s](#)
10. [Equilibrium point](#)
11. [Leaders in an array](#)
12. [Minimum Platforms](#)
13. [Reverse array in groups](#)
14. [K'th smallest element](#)
15. [Trapping Rain Water](#)
16. [Pythagorean Triplet](#)
17. [Chocolate Distribution Problem](#)
18. [Stock buy and sell](#)
19. [Element with left side smaller and right side greater](#)
20. [Convert array into Zig-Zag fashion](#)
21. [Last Index of 1](#)
22. [Spirally traversing a matrix](#)
23. [Largest Number formed from an Array](#)

Solved the above?

[Go for some more Questions](#)

It is important to have in-depth knowledge of the **data structure** and understanding of their working. If you wish to learn about the data structure and algorithms for the interview then you can check out our course [Tech Interview 101 – From DSA to System Design](#) to learn more about coding questions and more that are asked in the interview.

String

1. [Reverse words in a given string](#)
2. [Permutations of a given string](#)
3. [Longest Palindrome in a String](#)
4. [Recursively remove all adjacent duplicates](#)
5. [Check if string is rotated by two places](#)
6. [Roman Number to Integer](#)
7. [Anagram](#)
8. [Remove Duplicates](#)
9. [Form a Palindrome](#)

10. [Longest Distinct Characters in the string](#)
11. [Implement Atoi](#)
12. [Implement strstr](#)
13. [Longest Common Prefix](#)

Solved the above?

[Go for some more Questions](#)

Linked List

1. [Finding middle element in a linked list](#)
2. [Reverse a linked list](#)
3. [Rotate a Linked List](#)
4. [Reverse a Linked List in groups of given size](#)
5. [Intersection point in Y shaped linked lists](#)
6. [Detect Loop in linked list](#)
7. [Remove loop in Linked List](#)
8. [n'th node from end of linked list](#)
9. [Flattening a Linked List](#)
10. [Merge two sorted linked lists](#)
11. [Intersection point of two Linked Lists](#)
12. [Pairwise swap of a linked list](#)
13. [Add two numbers represented by linked lists](#)
14. [Check if Linked List is Palindrome](#)
15. [Implement Queue using Linked List](#)
16. [Implement Stack using Linked List](#)
17. [Given a linked list of 0s, 1s and 2s, sort it](#)
18. [Delete without head pointer](#)

Stack and Queue

1. [Parenthesis Checker](#)
2. [Next larger element](#)
3. [Queue using two Stacks](#)
4. [Stack using two queues](#)
5. [Get minimum element from stack](#)

6. [LRU Cache](#)
7. [Circular tour](#)
8. [First non-repeating character in a stream](#)
9. [Rotten Oranges](#)
10. [Maximum of all subarrays of size k](#)

Tree

1. [Print Left View of Binary Tree](#)
2. [Check for BST](#)
3. [Print Bottom View of Binary Tree](#)
4. [Print a Binary Tree in Vertical Order](#)
5. [Level order traversal in spiral form](#)
6. [Connect Nodes at Same Level](#)
7. [Lowest Common Ancestor in a BST](#)
8. [Convert a given Binary Tree to Doubly Linked List](#)
9. [Write Code to Determine if Two Trees are Identical or Not](#)
10. [Given a binary tree, check whether it is a mirror of itself](#)
11. [Height of Binary Tree](#)
12. [Maximum Path Sum](#)
13. [Diameter of a Binary Tree](#)
14. [Number of leaf nodes](#)
15. [Check if given Binary Tree is Height Balanced or Not](#)
16. [Serialize and Deserialize a Binary Tree](#)

Solved the above?

[Go for some more Questions](#)

Heap

1. [Find median in a stream](#)
2. [Heap Sort](#)
3. [Operations on Binary Min Heap](#)
4. [Rearrange characters](#)
5. [Merge K sorted linked lists](#)
6. [Kth largest element in a stream](#)

Recursion

1. [Flood fill Algorithm](#)
2. [Number of paths](#)
3. [Combination Sum – Part 2](#)
4. [Special Keyboard](#)
5. [Josephus problem](#)

Hashing

1. [Relative Sorting](#)
2. [Sorting Elements of an Array by Frequency](#)
3. [Largest subarray with 0 sum](#)
4. [Common elements](#)
5. [Find all four sum numbers](#)
6. [Swapping pairs make sum equal](#)
7. [Count distinct elements in every window](#)
8. [Array Pair Sum Divisibility Problem](#)
9. [Longest consecutive subsequence](#)
10. [Array Subset of another array](#)
11. [Find all pairs with a given sum](#)
12. [Find first repeated character](#)
13. [Zero Sum Subarrays](#)
14. [Minimum indexed character](#)
15. [Check if two arrays are equal or not](#)
16. [Uncommon characters](#)
17. [Smallest window in a string containing all the characters of another string](#)
18. [First element to occur k times](#)
19. [Check if frequencies can be equal](#)

Graph

1. [Depth First Traversal](#)
2. [Breadth First Traversal](#)
3. [Detect cycle in undirected graph](#)
4. [Detect cycle in a directed graph](#)

5. [Topological sort](#)
6. [Find the number of islands](#)
7. [Implementing Dijkstra](#)
8. [Minimum Swaps](#)
9. [Strongly Connected Components](#)
10. [Shortest Source to Destination Path](#)
11. [Find whether path exist](#)
12. [Minimum Cost Path](#)
13. [Circle of Strings](#)
14. [Floyd Warshall](#)
15. [Alien Dictionary](#)
16. [Snake and Ladder Problem](#)

Greedy

1. [Activity Selection](#)
2. [N meetings in one room](#)
3. [Coin Piles](#)
4. [Maximize Toys](#)
5. [Page Faults in LRU](#)
6. [Largest number possible](#)
7. [Minimize the heights](#)
8. [Minimize the sum of product](#)
9. [Huffman Decoding](#)
10. [Minimum Spanning Tree](#)
11. [Shop in Candy Store](#)
12. [Geek collects the balls](#)

Dynamic Programming

1. [Minimum Operations](#)
2. [Max length chain](#)
3. [Minimum number of Coins](#)
4. [Longest Common Substring](#)
5. [Longest Increasing Subsequence](#)

6. [Longest Common Subsequence](#)
7. [0 – 1 Knapsack Problem](#)
8. [Maximum sum increasing subsequence](#)
9. [Minimum number of jumps](#)
10. [Edit Distance](#)
11. [Coin Change Problem](#)
12. [Subset Sum Problem](#)
13. [Box Stacking](#)
14. [Rod Cutting](#)
15. [Path in Matrix](#)
16. [Minimum sum partition](#)
17. [Count number of ways to cover a distance](#)
18. [Egg Dropping Puzzle](#)
19. [Optimal Strategy for a Game](#)
20. [Shortest Common Supersequence](#)

Divide and Conquer

1. [Find the element that appears once in sorted array](#)
2. [Search in a Rotated Array](#)
3. [Binary Search](#)
4. [Sum of Middle Elements of two sorted arrays](#)
5. [Quick Sort](#)
6. [Merge Sort](#)
7. [K-th element of two sorted Arrays](#)

Backtracking

1. [N-Queen Problem](#)
2. [Solve the Sudoku](#)
3. [Rat in a Maze Problem](#)
4. [Word Boggle](#)
5. [Generate IP Addresses](#)

Bit Magic

1. [Find first set bit](#)

2. [Rightmost different bit](#)
3. [Check whether K-th bit is set or not](#)
4. [Toggle bits given range](#)
5. [Set kth bit](#)
6. [Power of 2](#)
7. [Bit Difference](#)
8. [Rotate Bits](#)
9. [Swap all odd and even bits](#)
10. [Count total set bits](#)
11. [Longest Consecutive 1's](#)
12. [Sparse Number](#)
13. [Alone in a couple](#)
14. [Maximum subset XOR](#)

Some More Questions on Arrays

1. [Find Missing And Repeating](#)
2. [Maximum Index](#)
3. [Consecutive 1's not allowed](#)
4. [Majority Element](#)
5. [Two numbers with sum closest to zero](#)
6. [Nuts and Bolts Problem](#)
7. [Boolean Matrix Problem](#)
8. [Smallest Positive missing number](#)
9. [Jumping Caterpillars](#)

Some More Questions on Strings

1. [Most frequent word in an array of strings](#)
2. [CamelCase Pattern Matching](#)
3. [String Ignorance](#)
4. [Smallest window in a string containing all the characters of another string](#)
5. [Design a tiny URL or URL shortener](#)
6. [Permutations of a given string](#)
7. [Non Repeating Character](#)

8. [Check if strings are rotations of each other or not](#)
9. [Save Ironman](#)
10. [Repeated Character](#)
11. [Remove common characters and concatenate](#)
12. [Geek and its Colored Strings](#)
13. [Second most repeated string in a sequence](#)