

Most Asked 150 Coding Questions in Top MNCs

◆ Easy Level (50 Questions)

1. Reverse a String
2. Check Palindrome (string/number)
3. Fibonacci Series (n terms, recursion + iteration)
4. Factorial of a Number (recursion + iteration)
5. Check Prime Number
6. Print Prime Numbers in a Range
7. Sum of Digits of a Number
8. Count Number of Digits
9. GCD of Two Numbers
10. LCM of Two Numbers
11. Second Largest in Array
12. Largest and Smallest in Array
13. Find Missing Number in Array (1 to n)
14. Find Duplicate in Array
15. Reverse Number
16. Swap Two Numbers Without Temp Variable
17. Count Vowels & Consonants in String
18. Check if Two Strings Are Anagrams
19. Count Occurrences of a Word in String
20. Remove Duplicates from Array
21. Rotate Array by k Steps
22. Linear Search
23. Binary Search
24. Bubble Sort
25. Selection Sort
26. Insertion Sort
27. Print Pascal's Triangle
28. Print Star Patterns (triangle, pyramid)
29. Convert Decimal to Binary
30. Convert Binary to Decimal
31. Check Leap Year
32. Power of a Number
33. Strong Number (sum of factorial of digits)
34. Automorphic Number Check
35. Harshad Number Check
36. Perfect Number Check
37. Friendly Pair Check (Amicable Numbers)
38. Remove Character from String
39. Reverse Words in String
40. Check Pangram
41. Count Words in String

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- 42. Convert Roman to Integer
 - 43. Convert Integer to Roman
 - 44. Find Median of Array
 - 45. Find Mode of Array
 - 46. Sum of Array Elements
 - 47. Count Set Bits in Number
 - 48. Maximum & Minimum in Array
 - 49. Check Armstrong Number
 - 50. Check Palindrome Number in a Range
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◆ Medium Level (50 Questions)

- 1. Two Sum Problem (Pair with Given Sum)
- 2. Subarray with Given Sum (Sliding Window)
- 3. Move Zeroes to End of Array
- 4. Sort Array of 0s, 1s, 2s (Dutch National Flag Problem)
- 5. Longest Substring Without Repeating Characters
- 6. Check Balanced Parentheses (Stack)
- 7. Stock Buy and Sell Problem (Max Profit)
- 8. Rotate Matrix 90° Clockwise
- 9. Spiral Traversal of Matrix
- 10. Transpose of Matrix
- 11. Find Saddle Point in Matrix
- 12. Check Sudoku Validity
- 13. Nth Fibonacci Using DP
- 14. Count Ways to Climb Stairs (DP)
- 15. Minimum Steps to Reach End of Array (Greedy)
- 16. Remove Duplicate Characters from String
- 17. Longest Palindromic Substring (Brute Force)
- 18. Longest Repeating Subsequence (DP)
- 19. Generate All Permutations of String
- 20. Generate All Subsets of Array
- 21. Generate Balanced Parentheses for n pairs
- 22. Tower of Hanoi
- 23. Rat in a Maze Problem
- 24. Flood Fill Algorithm
- 25. Implement Queue Using Stacks
- 26. Implement Stack Using Queues
- 27. Next Greater Element
- 28. Previous Greater Element
- 29. Next Smaller Element
- 30. Evaluate Postfix Expression
- 31. Convert Infix to Postfix
- 32. Minimum Bracket Reversals to Balance Expression
- 33. Largest Rectangle in Histogram
- 34. Trapping Rain Water Problem

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- 35. Sliding Window Maximum
 - 36. Longest Consecutive Sequence in Array
 - 37. Sort Stack Using Recursion
 - 38. Kth Largest/Smallest Element (Heap/Quickselect)
 - 39. Count Distinct Elements in Every Window of Size k
 - 40. Maximum Sum Subarray of Size k
 - 41. Search in Rotated Sorted Array
 - 42. Merge Intervals
 - 43. Interval Scheduling (Activity Selection)
 - 44. Maximum Length of Subarray with 0 Sum
 - 45. Longest Subarray with At Most K Distinct Elements
 - 46. Subarray Product Less Than K
 - 47. Find Majority Element ($>n/2$ times)
 - 48. Find Intersection of Two Arrays
 - 49. Longest Prefix Suffix (LPS Array)
 - 50. Minimum Size Subarray Sum
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♦ Advanced Level (50 Questions)

- 1. Longest Palindromic Subsequence (DP)
- 2. Edit Distance (Levenshtein DP)
- 3. Word Break Problem (DP)
- 4. Coin Change Problem (Min Coins / Total Ways)
- 5. 0/1 Knapsack Problem
- 6. Subset Sum Problem
- 7. Matrix Chain Multiplication (DP)
- 8. Longest Increasing Subsequence
- 9. Maximum Sum Increasing Subsequence
- 10. Maximum Product Subarray
- 11. Count Inversions in Array (Merge Sort)
- 12. Median of Two Sorted Arrays (Binary Search)
- 13. Find Duplicates in O(1) Space (Floyd's Cycle Method)
- 14. Maximum Circular Subarray Sum
- 15. Longest Bitonic Subsequence
- 16. Minimum Number of Platforms (Railway Problem)
- 17. Job Sequencing Problem (Greedy)
- 18. Activity Selection Problem
- 19. Gas Station Problem
- 20. N Queens Problem (Backtracking)
- 21. Sudoku Solver
- 22. Hamiltonian Cycle (Graph Backtracking)
- 23. Knight's Tour Problem
- 24. Graph BFS Traversal
- 25. Graph DFS Traversal
- 26. Detect Cycle in Graph (DFS / Union Find)
- 27. Topological Sort (DFS / Kahn's Algorithm)

28. Dijkstra's Algorithm (Shortest Path)
 29. Bellman-Ford Algorithm
 30. Floyd-Warshall Algorithm
 31. Minimum Spanning Tree (Prim's / Kruskal's)
 32. Detect Bipartite Graph
 33. Snake and Ladder Problem (Graph BFS)
 34. Word Ladder Problem (BFS)
 35. LRU Cache Implementation
 36. LFU Cache Implementation
 37. Implement Trie (Prefix Tree)
 38. Search Word Suggestions Using Trie
 39. Longest Common Subsequence
 40. Shortest Common Supersequence
 41. Minimum Window Substring
 42. Palindrome Partitioning (DP)
 43. Count Palindromic Subsequences
 44. Longest Repeating Substring
 45. Maximum Rectangle in Binary Matrix
 46. Largest Area of Island in Grid (DFS)
 47. Course Schedule Problem (Graph + Topological Sort)
 48. Implement Disjoint Set (Union Find)
 49. Kruskal's Algorithm with Union by Rank + Path Compression
 50. Minimum Spanning Tree Applications (network design case)
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Note: Each question is prepared to cover patterns seen in service-based and product-based MNCs.