

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

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

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.