

Adobe DSA Previous Year Questions

Easy

- Write the code for this: Two Sum
(Given an array and target, find two numbers whose sum equals the target.)
- Write the code for this: Merge Two Sorted Lists
(Merge two sorted linked lists into one sorted list.)
- Write the code for this: Reverse Linked List
(Reverse a singly linked list.)
- Write the code for this: Palindrome Linked List
(Check if a linked list reads the same forwards and backwards.)
- Write the code for this: Happy Number
(Determine if repeatedly summing the squares of digits leads to 1.)
- Write the code for this: Best Time to Buy and Sell Stock
(Given prices by day, find max profit from one buy-sell transaction.)
- Write the code for this: Climbing Stairs
(Count ways to reach the top by taking 1 or 2 steps.)



- Write the code for this: Range Sum Query - Immutable
(Preprocess an array so you can quickly return the sum between two indices.)
- Write the code for this: Remove Duplicates from Sorted List
(Delete duplicate nodes from a sorted linked list.)
- Write the code for this: Sort Integers by The Number of 1 Bits
(Sort an integer array by the count of 1's in their binary form.)
- Write the code for this: Combine Two Tables
(From two database tables, join rows by matching keys and return merged results.)
- Write the code for this: Design HashSet
(Implement a hash-set with add, remove, and contains.)
- Write the code for this: Running Sum of 1d Array
(Return an array where each element is the sum of all previous elements.)
- Write the code for this: Pascal's Triangle
(Generate the first n rows of Pascal's triangle.)



- Write the code for this: Longest Common Prefix
(Find the longest common starting substring among an array of strings.)
- Write the code for this: Reverse Integer
(Reverse the digits of an integer, handling overflow.)
- Write the code for this: Best Time to Buy and Sell Stock with Cooldown
(Given prices, maximize profit with a one-day cooldown after selling.)
- Write the code for this: Excel Sheet Column Title
(Convert a positive integer to its corresponding Excel column name.)
- Write the code for this: Delete Node in a Linked List
(Given only access to a node, delete it from the linked list.)
- Write the code for this: Second Highest Salary
(From an Employees table, find the second highest salary.)
- Write the code for this: Shuffle the Array
(Given an array, return it “shuffled” in the prescribed pattern.)
- Write the code for this: Merge Sorted Array
(Merge two sorted arrays into one in-place.)



- Write the code for this: Roman to Integer
(Convert a Roman numeral string to an integer.)
- Write the code for this: Single Number
(Find the element that appears only once when every other appears twice.)
- Write the code for this: Count Primes
(Count the number of primes less than a given n.)
- Write the code for this: Minimum Depth of Binary Tree
(Find the shortest root-to-leaf path length in a binary tree.)
- Write the code for this: Move Zeroes
(Move all zeros in an array to the end while preserving order.)
- Write the code for this: Reverse String
(Reverse an array of characters in-place.)
- Write the code for this: Maximum Depth of Binary Tree
(Return the height of a binary tree.)
- Write the code for this: First Bad Version
(Use an API to binary-search for the first failing version.)



- Write the code for this: Diameter of Binary Tree
(Find the longest path between any two nodes in a tree.)
- Write the code for this: Defanging an IP Address
(Insert “[.]” in place of each period in an IP string.)
- Write the code for this: Kids With the Greatest Number of Candies
(Given candy counts and extraCandies, who can tie or beat the max.)
- Write the code for this: Richest Customer Wealth
(Given accounts of wealth per customer, find the richest.)
- Write the code for this: Valid Parentheses
(Check if brackets in a string are properly matched.)
- Write the code for this: Implement strStr()
(Return the index of the first occurrence of a substring.)
- Write the code for this: Symmetric Tree
(Check if a binary tree is a mirror of itself.)
- Write the code for this: Linked List Cycle
(Detect if a linked list has a cycle.)



- Write the code for this: Remove Element
(Remove all instances of a value in-place in an array.)
 - Write the code for this: Valid Anagram
(Determine if two strings are anagrams.)
 - Write the code for this: Number of 1 Bits
(Count the number of set bits in an integer.)
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Medium

- Write the code for this: Add Two Numbers
(Add two numbers represented by linked lists, digit by digit.)
- Write the code for this: Longest Well-Performing Interval
(Find the longest subarray where “tiring days” outnumber restful days.)
- Write the code for this: Coin Change 2
(Count combinations to make up an amount with given coin denominations.)
- Write the code for this: 3Sum
(Find all unique triplets that sum to zero in an array.)

- Write the code for this: Bitwise AND of Numbers Range
(Compute the bitwise AND of all numbers in a closed interval.)
- Write the code for this: Longest Substring Without Repeating Characters
(Find the length of the longest substring without duplicate chars.)
- Write the code for this: Generate Parentheses
(Return all well-formed combinations of n pairs of parentheses.)
- Write the code for this: Ugly Number II
(Find the n^{th} number whose only prime factors are 2,3,5.)
- Write the code for this: Daily Temperatures
(For each day, find how many days until a warmer temperature.)
- Write the code for this: Merge Intervals
(Given intervals, merge all overlapping ones.)
- Write the code for this: Integer Break
(Break n into at least two integers to maximize their product.)

- Write the code for this: Distribute Coins in Binary Tree
(Move coins so each node has one; minimize moves.)
- Write the code for this: Find And Replace in String
(Perform multiple find-and-replace operations at given indices.)
- Write the code for this: Maximum Number of Events That Can Be Attended
(Attend the maximum number of events given start/end days.)
- Write the code for this: Jump Game
(Determine if you can reach the last index with given jump lengths.)
- Write the code for this: Koko Eating Bananas
(Find the minimum eating speed to finish piles within H hours.)
- Write the code for this: House Robber II
(Maximize theft in a circular arrangement of houses.)
- Write the code for this: Container With Most Water
(Find two lines that together with the x-axis form the biggest container.)
- Write the code for this: Maximal Square
(Find the largest square of 1's in a binary matrix.)

- Write the code for this: Subarray Sum Equals K
(Count the number of contiguous subarrays summing to k.)
- Write the code for this: Balance a Binary Search Tree
(Rebuild a BST into a height-balanced tree.)
- Write the code for this: Unique Binary Search Trees
(Count structurally unique BSTs with n nodes.)
- Write the code for this: Integer to Roman
(Convert an integer to a Roman numeral.)
- Write the code for this: Contiguous Array
(Find the longest subarray with equal numbers of 0's and 1's.)
- Write the code for this: Range Sum Query - Mutable
(Support updating an array and querying subarray sums.)
- Write the code for this: Design Add and Search Words Data Structure
(Implement a word dictionary with wildcard "." support.)
- Write the code for this: Swap Nodes in Pairs
(Swap every two adjacent nodes in a linked list.)
- Write the code for this: Reverse Linked List II
(Reverse a sublist between positions m and n.)

- Write the code for this: Group Anagrams
(Group strings that are anagrams.)
- Write the code for this: Binary Tree Level Order Traversal
(Return nodes level by level in a binary tree.)
- Write the code for this: Search a 2D Matrix
(Search a value in a row- and column-sorted matrix.)
- Write the code for this: Search in Rotated Sorted Array
(Search for a target in a rotated sorted array.)
- Write the code for this: Minimum Path Sum
(Find a path with minimal sum from top-left to bottom-right of a grid.)
- Write the code for this: Swap Nodes in Pairs
(Swap every two adjacent nodes in a linked list.)
- Write the code for this: Evaluate Reverse Polish Notation
(Evaluate an arithmetic expression in RPN.)
- Write the code for this: Target Sum
(Count ways to assign +/- to reach a target sum.)

- Write the code for this: Interval List Intersections
(Find intersections between two lists of intervals.)
- Write the code for this: Remove Duplicates from Sorted List II
(Remove all duplicates so each element appears once.)
- Write the code for this: Combination Sum
(Find combinations summing to a target.)
- Write the code for this: Binary Tree Level Order Traversal II
(Return nodes from bottom to top, level by level.)
- Write the code for this: Number of Islands
(Count islands of 1's in a 2D grid.)
- Write the code for this: Path Sum II
(Find all root-to-leaf paths summing to a given value.)
- Write the code for this: Search Insert Position
(Find the index where a target should be inserted in a sorted array.)
- Write the code for this: Flatten Binary Tree to Linked List
(Transform a tree into a linked list in-place following preorder.)

- Write the code for this: Is Subsequence
(Check if one string is a subsequence of another.)
- Write the code for this: First Unique Character in a String
(Find the first non-repeating character in a string.)
- Write the code for this: Permutations
(Return all permutations of an array.)
- Write the code for this: 3Sum Closest
(Find a triplet whose sum is closest to a target.)
- Write the code for this: Search a 2D Matrix II
(Search a value in a sorted matrix where rows and columns are sorted.)

Hard

- Write the code for this: Burst Balloons
(Maximize coins by bursting balloons in optimal order.)
- Write the code for this: Maximal Rectangle
(Find the largest rectangle of 1's in a binary matrix.)

- Write the code for this: Dice Roll Simulation
(Given n dice rolls, count sequences without k consecutive identical rolls.)
- Write the code for this: Minimum Number of Taps to Open to Water a Garden
(Open minimum taps to cover the garden interval.)
- Write the code for this: Substring with Concatenation of All Words
(Find all starting indices of substrings that are a concatenation of each word exactly once.)
- Write the code for this: Wildcard Matching
(Implement glob matching with '?' and '.)*
- Write the code for this: Best Time to Buy and Sell Stock III
(Maximize profit with at most two transactions.)
- Write the code for this: Critical Connections in a Network
(Find all critical edges in a network graph.)
- Write the code for this: Count of Smaller Numbers After Self
(For each element, count smaller elements to its right.)



- Write the code for this: Sliding Window Median
(Return medians for each sliding window in an array.)
- Write the code for this: Minimum Window Substring
(Find the smallest substring containing all characters of another.)
- Write the code for this: Distinct Subsequences
(Count how many ways s can appear as a subsequence of t.)
- Write the code for this: Median of Two Sorted Arrays
(Find the median of two sorted arrays in logarithmic time.)
- Write the code for this: Vertical Order Traversal of a Binary Tree
(Traverse a tree column by column, top to bottom.)
- Write the code for this: Longest Consecutive Sequence
(Find the length of the longest run of consecutive integers.)
- Write the code for this: Trapping Rain Water
(Compute how much water is trapped after raining on bars.)
- Write the code for this: Reverse Nodes in k-Group
(Reverse nodes in k-sized groups in a linked list.)



- Write the code for this: Best Time to Buy and Sell Stock IV
(Maximize profit with up to k transactions.)
- Write the code for this: Sudoku Solver
(Fill a board to solve a Sudoku puzzle.)
- Write the code for this: Merge k Sorted Lists
(Merge k sorted linked lists into one.)
- Write the code for this: Word Break II
(Return all sentences by inserting spaces to form dictionary words.)
- Write the code for this: N-Queens
(Count all solutions to place n queens on an $n \times n$ chessboard.)
- Write the code for this: Integer to English Words
(Convert a non-negative integer to its English words representation.)
- Write the code for this: Binary Tree Maximum Path Sum
(Find the maximum path sum in a binary tree.)
- Write the code for this: Largest Rectangle in Histogram
(Find the largest rectangle area in a histogram of heights.)



- Write the code for this: Regular Expression Matching
(Implement regex matching with '.' and '*')
 - Write the code for this: Word Break II
(Return all valid segmentations of a string into dictionary words.)
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