

Day 1 – Arrays Basics

1. Find the maximum element in an array
2. Find the minimum element in an array
3. Reverse an array in-place
4. Rotate array by k positions
5. Find the second largest element
6. Compute prefix sums of an array
7. Check if array is sorted
8. Find frequency of each element
9. Move all zeros to the end
10. Find leaders in an array
11. Find missing number in 1..n array
12. Linear search for a target element
13. Binary search in a sorted array
14. Find intersection of two arrays
15. Find union of two arrays
16. Count occurrences of an element
17. Find subarray with maximum sum (Kadane's algorithm)
18. Sort colors (Dutch National Flag problem)
19. Merge two sorted arrays
20. Find majority element in an array

Day 2 – Arrays (Basic)

1. Find missing number in an array of size $n-1$ with numbers $1..n$
2. Remove duplicates from a sorted array
3. Move all zeros to end
4. Union of two arrays
5. Intersection of two arrays
6. Find leaders in an array
7. Rotate array by k positions
8. Find max and min element
9. Check if array is sorted
10. Compute prefix sums
11. Find second largest element
12. Count occurrences of a number
13. Linear search
14. Binary search
15. Reverse array
16. Find subarray with maximum sum
17. Sort array of 0,1,2
18. Find majority element
19. Find duplicate number
20. Find missing elements in an unsorted array

Day 3 – Arrays Easy/Medium

1. LeetCode 1: Two Sum
2. LeetCode 53: Maximum Subarray
3. LeetCode 121: Best Time to Buy and Sell Stock
4. LeetCode 238: Product of Array Except Self
5. LeetCode 287: Find the Duplicate Number
6. LeetCode 167: Two Sum II - Input array is sorted
7. GFG: Leaders in an array
8. GFG: Kadane's Algorithm
9. GFG: Minimum swaps to sort
10. GFG: Maximum consecutive 1s
11. GFG: Rotate matrix 90 degree
12. GFG: Trapping Rain Water
13. LeetCode 42: Trapping Rain Water
14. LeetCode 238: Product of Array Except Self
15. LeetCode 905: Sort Array By Parity
16. LeetCode 283: Move Zeroes
17. LeetCode 88: Merge Sorted Array
18. LeetCode 977: Squares of a Sorted Array
19. LeetCode 1480: Running Sum of 1d Array
20. LeetCode 169: Majority Element

Day 4 – Strings Basics

1. Reverse a string
2. Check if a string is palindrome
3. Find length of string without using built-in function
4. Count vowels and consonants
5. Remove spaces from a string
6. Check if two strings are anagrams
7. Compare two strings
8. Substring extraction
9. Find first non-repeating character
10. Find first repeating character
11. Concatenate two strings
12. Convert string to integer (atoi)
13. Check rotations of strings
14. Remove duplicates in string
15. Find longest word in sentence
16. Check if string is palindrome ignoring case
17. Replace character in string
18. Check if string contains only digits
19. Check if string is valid number
20. Check if string contains substring

Day 5 – Strings (Basic)

1. Find longest common prefix
2. Implement strstr()
3. Check string rotations
4. Remove duplicate characters
5. Count words in a string
6. Check if two strings are isomorphic
7. Check if string contains all vowels
8. Reverse words in a sentence
9. Convert string to uppercase
10. Convert string to lowercase
11. Check if string contains only digits
12. Check if string starts with prefix
13. Check if string ends with suffix
14. Find all permutations of string
15. Check if two strings are anagrams ignoring spaces
16. Count occurrence of a substring
17. Remove punctuation from string
18. Check if string is palindrome ignoring spaces
19. Find first unique word in string
20. Replace spaces with %20 (URLify)

Day 6 – Strings Easy/Medium

1. LeetCode 344: Reverse String
2. LeetCode 14: Longest Common Prefix
3. LeetCode 242: Valid Anagram
4. LeetCode 49: Group Anagrams
5. LeetCode 3: Longest Substring Without Repeating Characters
6. LeetCode 28: Implement strStr()
7. GFG: Longest Palindrome in a string
8. LeetCode 171: Excel Sheet Column Number
9. LeetCode 58: Length of Last Word
10. LeetCode 387: First Unique Character in a String
11. LeetCode 205: Isomorphic Strings
12. LeetCode 6: ZigZag Conversion
13. LeetCode 383: Ransom Note
14. GFG: Count number of subsequences
15. GFG: Replace all spaces
16. LeetCode 791: Custom Sort String
17. LeetCode 521: Longest Uncommon Subsequence I
18. GFG: Check if two strings are rotations
19. LeetCode 271: Encode and Decode String
20. LeetCode 709: To Lower Case

Day 7 – Weekly Contest / Review

1. Solve 7–10 easy array/string problems from LeetCode/GFG
2. Reattempt tricky problems from Day 1–6
3. Timed 1-hour mock contest with 5–7 problems
4. Analyze mistakes and revise concepts
5. Focus on weak topics for arrays/strings
6. Practice coding in $O(N)$ or $O(N \log N)$ time
7. Implement optimized solutions
8. Re-solve problems without looking at hints
9. Review all important string and array functions
10. Plan next week's recursion practice
11. Solve 2 LeetCode easy + 2 medium problems
12. Review problem-solving patterns learned
13. Focus on sliding window / two-pointer techniques
14. Optimize previously solved problems
15. Check edge cases for all problems
16. Verify time and space complexity
17. Write short notes for tricky problems
18. Attempt GFG challenge problems
19. Revisit prefix sum / Kadane's pattern
20. Final review before moving to recursion