String Problems Difficulty Level Array Problems Summary

Merge Intervals Example

Fast and Slow Pointers

Matrix Pattern Problems

Two Pointers Problems

recursion based top 15 problem commonly asked in interview questions.

Get citation

give input and output of the problem.

list 5 easy, 5 medium, 5 hard difficulty problems.

Sure, here are some common recursion-based problems categorized by difficulty:

Easy

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1. Factorial

- Input: `n = 5`
- Output: `120`

2. Fibonacci Sequence







• Input: `n = 4`

• Output: `3` (Fibonacci sequence: 0, 1, 1, 2, 3)

3. Power of a Number

- Input: `x = 2, n = 3`
- Output: `8` (2^3)

4. Sum of Natural Numbers

- Input: `n = 4`
- Output: `10` (1 + 2 + 3 + 4)

5. Reverse a String

- Input: `s = "hello"`
- Output: `"olleh"`

Medium



1. N-Queens Problem

- Input: `n = 4`
- Output: [[1, 3, 0, 2], [2, 0, 3, 1]] (Solutions are the arrangements of queens on the board)

2. Permutations of a String

- Input: `s = "abc" `
- Output: `["abc", "acb", "bac", "bca", "cab", "cba"] `

3. Combination Sum

- Input: `candidates = [2, 3, 6, 7], target = 7`
- Output: `[[2, 2, 3], [7]]`

4. Generate Parentheses

- Input: `n = 3`
- Output: `["((()))", "(()())", \(\psi\))()", "()(())", "()()()"]`

5. Subsets

- Input: `nums = [1, 2, 3]`
- Output: `[[], [1], [2], [1, 2], [3], [1, 3], [2, 3], [1, 2, 3]]`

Hard

1. Word Break

- Input: `s = "leetcode", wordDict = ["leet", "code"]`
- Output: `true` (Can be segmented into "leet code")

2. Palindrome Partitioning

- Input: `s = "aab"`
- Output: `[["a", "a", "b"], ["aa", "b"]]`

3. Sudoku Solver

· Input:



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• Output: The solved board with all cells filled with numbers 1-9.

4. Generate All Unique Permutations

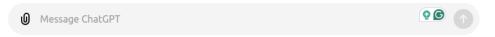
- Input: `nums = [1,1,2]`
- Output: `[[1,1,2], [1,2,1], [2,1,1]]`
- 5. Combination Sum II
 - Input: `candidates = [10,1,2,7,6,5], target = 8`
 - Output: `[[1, 2, 5], [1, 7], [2, 6]]`

These problems span a range of recursion techniques and are frequently asked in technical interviews.



Is this conversation helpful so far? 🔥 🖓 🗴





ChatGPT can make mistakes. Check important info.

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