ChatGPT

88 Explore GPTs

Today

Recursion Problem List

Hashmap Interview Questions

Top Graph Problems

Math Interview Problems

String Problems Difficulty Level

Array Problems Summary

Merge Intervals Example

Fast and Slow Pointers

Matrix Pattern Problems

Two Pointers Problems

Linkedlist based top 15 problem commonly asked in interview questions. give input and output of the problem. list 5 easy, 5 medium, 5 hard difficulty problems.

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Sure! Here are some common linked list problems categorized by difficulty, along with their inputs and outputs:

Easy

- 1. Reverse a Linked List
 - Input: 1 -> 2 -> 3 -> 4 -> 5
 - Output: 5 -> 4 -> 3 -> 2 -> 1
- (**J**



- 2. Detect a Cycle in a Linked List
 - Input: 1 -> 2 -> 3 -> 4 -> 5 -> (points back to 2)
 - Output: True (Cycle detected)
- 3. Find the Middle of a Linked List
 - Input: 1 -> 2 -> 3 -> 4 -> 5
 - Output: 3
- 4. Merge Two Sorted Linked Lists
 - Input: List 1: 1 -> 3 -> 5; List 2: 2 -> 4 -> 6
 - Output: 1 -> 2 -> 3 -> 4 -> 5 -> 6
- 5. Remove Duplicates from a Sorted Linked List
 - Input: 1 -> 1 -> 2 -> 3 -> 3
 - Output: 1 -> 2 -> 3



Medium

- 1. Add Two Numbers Represented by Linked Lists
 - Input: List 1: 2 -> 4 -> 3; List 2: 5 -> 6 -> 4
 - Output: 7 -> 0 -> 8 (represents 807)
- 2. Intersection of Two Linked Lists
 - Input: List 1: 4 -> 1 -> 8 -> 4 -> 5; List 2: 5 -> 6 -> 1 -> 8 -> 4 -> 5
 - Output: 8 -> 4 -> 5
- 3. Remove N-th Node From End of List
 - Input: 1 -> 2 -> 3 -> 4 -> 5, N = 2
 - Output: 1 -> 2 -> 3 -> 5
- 4. Rotate List
 - Input: List: 1 -> 2 -> 3 -> 4 -> 5, k = 2 ↓
 - Output: 4 -> 5 -> 1 -> 2 -> 3
- 5. Flatten a Multilevel Doubly Linked List
 - Input: 1 -> 2 -> 3 -> 4; 2 -> 5 -> 6 (where 5 and 6 are children of 2)
 - Output: 1 -> 2 -> 5 -> 6 -> 3 -> 4

1. Reverse Nodes in k-Group

- Input: List: 1 -> 2 -> 3 -> 4 -> 5, k = 3
- Output: 3 -> 2 -> 1 -> 4 -> 5

2. Copy List with Random Pointer

- Input: 1 (random: 2) -> 2 (random: 1) -> 3 (random: 3)
- Output: 1 (random: 2) -> 2 (random: 1) -> 3 (random: 3)

3. Remove Duplicates from an Unsorted ψ ked List

- Input: 1 -> 3 -> 4 -> 2 -> 3 -> 1
- Output: 1 -> 3 -> 4 -> 2

4. Sort a Linked List

- Input: 4 -> 2 -> 1 -> 3
- Output: 1 -> 2 -> 3 -> 4

5. Linked List Cycle Length

- Input: 1 -> 2 -> 3 -> 4 -> 5 -> 6 -> 2 (cycle starting at 2)
- Output: 5 (length of the cycle)

These problems should cover a broad range of common interview questions involving linked lists.



Is this conversation helpful so far? 🖒 🖓 🗴



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ChatGPT can make mistakes. Check important info.