Grokking the Coding Interview: Patterns for Coding Questions

Estimated completion time: 50h

Certificate Included

COURSE BY:

Design Gurus

182 Lessons | 125 Challenges | 1063 Playgrounds | 214 Illustrations

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Course Overview | Course Content | How You'll Learn

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Course Overview

Coding interviews are getting harder every day. A few years back, brushing up on key data structures and going through 50-75 coding interview questions was more than enough prep for an interview. Today, everyone has access to massive sets of coding problems, and they've gotten more difficult to account for that. The pr... See more

Course Contents

1. Introduction

- Who should take this course?
- Course Overview

2. Pattern: Sliding Window

- Introduction

Continue

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Access Expires: 10 Sep, 2021

- Maximum Sum Subarray of Size K (easy)
- Smallest Subarray with a given sum (easy)
- Longest Substring with K Distinct Characters (medium)
- Fruits into Baskets (medium)
- No-repeat Substring (hard)
- Longest Substring with Same Letters after Replacement (hard)
- Longest Subarray with Ones after Replacement (hard)
- Problem Challenge 1
- Solution Review: Problem Challenge 1
- Problem Challenge 2
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- Solution Review: Problem Challenge 3
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- Solution Review: Problem Challenge 4

3. Pattern: Two Pointers

- Introduction
- Pair with Target Sum (easy)
- Remove Duplicates (easy)
- Squaring a Sorted Array (easy)
- Triplet Sum to Zero (medium)
- Triplet Sum Close to Target (medium)
- Triplets with Smaller Sum (medium)
- Subarrays with Product Less than a Target (medium)
- Dutch National Flag Problem (medium)
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- Solution Review: Problem Challenge 2
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- Solution Review: Problem Challenge 3

4. Pattern: Fast & Slow pointers

- Introduction
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- Start of LinkedList Cycle (medium)
- Happy Number (medium)
- Middle of the LinkedList (easy)
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5. Pattern: Merge Intervals

- Introduction
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- Insert Interval (medium)
- Intervals Intersection (medium)
- Conflicting Appointments (medium)
- Problem Challenge 1
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- Solution Review: Problem Challenge 3

6. Pattern: Cyclic Sort

- Introduction
- Cyclic Sort (easy)
- Find the Missing Number (easy)
- Find all Missing Numbers (easy)
- Find the Duplicate Number (easy)
- Find all Duplicate Numbers (easy)
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7. Pattern: In-place Reversal of a LinkedList

- Introduction
- Reverse a LinkedList (easy)
- Reverse a Sub-list (medium)
- Reverse every K-element Sub-list (medium)
- Problem Challenge 1
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8. Pattern: Tree Breadth First Search

- Introduction
- Binary Tree Level Order Traversal (easy)
- Reverse Level Order Traversal (easy)
- Zigzag Traversal (medium)
- Level Averages in a Binary Tree (easy)
- Minimum Depth of a Binary Tree (easy)
- Level Order Successor (easy)

- Level Order Successor (easy)
- Connect Level Order Siblings (medium)
- Problem Challenge 1
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9. Pattern: Tree Depth First Search

- Introduction
- Binary Tree Path Sum (easy)
- All Paths for a Sum (medium)
- Sum of Path Numbers (medium)
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10. Pattern: Two Heaps

- Introduction
- Find the Median of a Number Stream (medium)
- Sliding Window Median (hard)
- Maximize Capital (hard)
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11. Pattern: Subsets

- Introduction
- Subsets (easy)
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- Unique Generalized Abbreviations (hard)
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- Ceiling of a Number (medium)

- Next Letter (medium)
- Number Range (medium)
- Search in a Sorted Infinite Array (medium)
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- Bitonic Array Maximum (easy)
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- Two Single Numbers (medium)
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14. Pattern: Top 'K' Elements

- Introduction
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- Kth Smallest Number (easy)
- 'K' Closest Points to the Origin (easy)
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- Frequency Sort (medium)
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- Solution Review: Problem Challenge 1

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- Solution Review: Problem Challenge 1
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- Solution Review: Problem Challenge 2

18. Miscellaneous

- Kth Smallest Number (hard)

19. Conclusions

- Where to Go from Here

How You'll Learn

Faster than videos

Videos are holding you back. The average video tutorial is spoken at 150 words per minute, while you can read at 250. That's why our courses are text-based.

Hands-on coding environments

You don't get better at swimming by watching others. Coding is no different. Practice as you learn with live code environments inside your browser.

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"The courses which have "grokking" before them, are exceptionally well put together! These courses magically condense 3 years of CS in short bite-size courses and lectures (I have tried System Design, OODI, and Coding patterns). The Grokking courses are godsent, to be honest."

Mo Jafri
Totally worth it!

"I'm a rising senior at UC Berkeley & just finished my 2nd internship at Google. This course provides the exact details that other coding platforms like LeetCode don't offer. I LOVE that the course is broken up into different "patterns" to develop a deep understanding of problems."

Riley Shanahan
Better than LeetCode and Cracking the Coding Interview

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Ahmet Hanif
Software Programmer

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