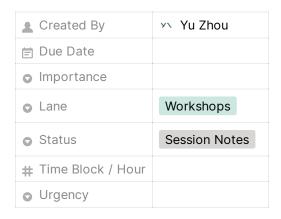
# Leetcode 101



# **Outline**

• Leetcode now has 1500 Problems

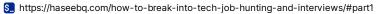


- How many leetcode problems are needed??
  - **▼** Topics
    - 20-30 per topics
    - What topic?

Leetcode 101

#### How to Break Into the Tech Industry-a Guide to Job Hunting and Tech Interviews

I recently completed a job search for my first role as a software engineer. Despite having first learned how to code almost a year before, having a background as an English major and former professional poker player, I was able to land a total of 8 offers including Google, Uber, Yelp, and





#### ▼ Recommended # of the problems solved

- Tier 1 / FAMNG + Unicorn startup (300-400 Problems):
  - Level: Medium/Hard, Ratio: 60 / 40
  - Lyft / Airbnb / Uber (300-400)
  - Amazon/Microsoft (200-300)
  - Google/Facebook (300-500)
- Tier 2 / Growing Startup + Known large corp.
  - Level: Easy / Medium / Hard , Ratio: 10 / 80 / 10
  - Yahoo / eBay (100 200)
  - Intercom / Cisco / Walmart (100 200)
- Tier 3 / Tech-related corp + others
  - Level: Easy / Medium / Hard , Ratio: 40 / 55 / 5
  - Synopsys / AMD / Nvidia (100)

#### ▼ How to do Leetcode?

▼ Be company specific

#### ▼ Tier 0-1

- Microsoft
- · Google
- Pinterest
- Stripe
- Square
- Twitch
- Dropbox
- Apple

- Linkedin
- Oculus
- Robinhood
- Square
- Affirm
- Nuro
- Quora
- Boston Dynamics

# ▼ Tier 2

- Adobe
- Nvidia
- reddit
- Rubrik
- Tesla
- Slack
- Twitch
- Twitter
- Uber
- SpaceX
- Snap.Inc
- Salesforce
- Yelp
- Atlassian
- Coursera
- Github
- tinder
- Scopely
- Palantir
- Bloomberg
- Didi
- Databricks
- postmates
- Discord

- Skype
- Okta
- Gusto
- VM Ware
- Khan Academy
- addepar
- Asana
- MongoDB
- Mozilla
- coinbase
- figma
- wealthfront
- Spotify NY
- Zoom
- Tableau
- Audible

# ▼ Tier 3

- Zillow
- NerdWallet
- WalmartLabs
- BlackRock
- Cloudera
- Oath
- Credit Karma
- Box
- Hulu
- Etsy
- Ebay
- Spunk
- pure storage
- Terradata
- viasat

- Intuit
- Intel
- Qualcomm
- Doordash
- Wish
- AutoDesk
- Grubhub
- workday
- Blend
- visa
- Trulia
- Qualia
- ripple
- Instacart
- Argo Al

# **▼** Trading

- Citadal
- Two Sigma
- addpar
- Jane Street

# **▼** Gaming

- Epic Games
- Unity
- Niantics
- Ubisoft
- Activision Blizzard
- Square Enix
- Naughty Dog
- Double Fine
- Amazon game studio
- Microsoft studios

- Sony Studios
- EA
- LucasFilm
- Dreamworks
- Valve
- Rockstar
- Bethesda
- Treyarch
- Pocket Gem
- Bungie

#### ▼ Prioritize topics

- ▼ Scrape Information
  - <a href="https://leetcode.com/discuss/interview-question?currentPage=1&orderBy=hot&query="https://leetcode.com/discuss/interview-question?currentPage=1&orderBy=hot&query="https://leetcode.com/discuss/interview-question?currentPage=1&orderBy=hot&query="https://leetcode.com/discuss/interview-question?currentPage=1&orderBy=hot&query="https://leetcode.com/discuss/interview-question?currentPage=1&orderBy=hot&query="https://leetcode.com/discuss/interview-question?currentPage=1&orderBy=hot&query="https://leetcode.com/discuss/interview-question?currentPage=1&orderBy=hot&query="https://leetcode.com/discuss/interview-question?currentPage=1&orderBy=hot&query="https://leetcode.com/discuss/interview-question?currentPage=1&orderBy=hot&query="https://leetcode.com/discuss/interview-question?currentPage=1&orderBy=hot&query="https://leetcode.com/discuss/interview-question?currentPage=1&orderBy=hot&query=1&ord
  - <a href="https://fellows.pathrise.com/static\_pages/interview\_prep\_guide">https://fellows.pathrise.com/static\_pages/interview\_prep\_guide</a>
- ▼ Organize data
  - ▼ High Frequency
  - **▼** Topics

# ▼ Plan

- ▼ Keep track of your data
  - Kanban / Agile
    - <a href="https://github.com/yuzhoujr/leetcode/projects/4">https://github.com/yuzhoujr/leetcode/projects/4</a>
  - Weekly Plan
  - Daily Plan
  - Redo
- **▼** Timer
  - **▼** Easy: 15
  - ▼ Medium: 25 30
  - ▼ Hard: 30 45
- ▼ Workflow
  - **▼** Template for Leetcode

#### Communication

Extract keywords (Input constrains, Data types, Scale of input)
☐ Classify the Problem
☐ What are the algorithms commonly used on this kind of problems?
Paraphrase the question
☐ Understand test cases / Ask for more test cases
☐ Function Signature
☐ Clerifications / Edge Cases
Problem Solving
☐ Trade Off Analysis
☐ Brute Force Solution
☐ Outline your approach
☐ Space & Time Complexity *& ***(call stack) - specify variables
(In what situations is the solution good? In what situations is the solution bad?)
☐ Analyze Inefficiency
Bottlenecks, Un-necessay Word, Duplication Work
☐ Optimal Solution
☐ Outline your approach
☐ Space & Time Complexity *& ***(call stack) - specify variables
☐ Compare it with Brute Force
Ask interviewer: "Does this sound like a good approach?"
Coding / Testing
☐ <b>Implemention</b> , keep comparing optimal solution and brute force solution, explain why this solution is better to show your understanding
☐ Verification
☐ Scan through
Run test cases - small/medium sized, one more likely to detect errors
Timebox
▼ First Try
▼ If you can't solve within 7 minutes, solution time

- ▼ Second Try
  - ▼ Try not to check solution
    - ▼ Easy: 20 minutes
    - ▼ Medium: 30 minutes
    - ▼ Hard: 40 minutes
- **▼** Third Try
  - ▼ Easy: 10 minutes
  - ▼ Medium: 20 minutes
  - ▼ Hard: 30 minutes
- ▼ Take a break and study
  - ▼ Discussion Board
  - ▼ YouTube
    - <a href="https://www.youtube.com/watch?v=o8S2bO3pmO4">https://www.youtube.com/watch?v=o8S2bO3pmO4</a>
    - Study for topics
  - ▼ 9 Chapter
    - ▼ <a href="https://chrome.google.com/webstore/detail/九章刷题小助手/anljhkoknafhgofbdhoijjojmhhncblo?hl=zh-CN">https://chrome.google.com/webstore/detail/九章刷题小助手/anljhkoknafhgofbdhoijjojmhhncblo?hl=zh-CN</a>
- ▼ Understand why you are stuck
  - Problem solving?
    - No clue at all?
      - Check tag, and study the tag
    - Have clue, but stuck?
      - Check tag, and study the tag
  - · Coding?
    - Constantly getting bugs?
      - · Formulate a bug check list
    - · DFS Error checklsit
      - ☐ Have I checked my parameter when recursively calling