Thanks to leetcode community. It's time to give back.

About Me

Leetcode stats: 246
YOE: 10

Preparation

- July/2020: Started practicing with Leetcode easy collection.
- August/2020: Gave up. Too hard.
- Sept/2020: Started practicing again. Bought leetcode premium.
- Oct/2020: Contacted by recruiter.
- Dec/2020: Phone interview. Really annoyed by the way HackerRank hid the tests. Passed all the tests anyways. Pro tips: to debug the hidden test, print out the arguments.

On site Jan 2021

- Leetcode medium/easy question, typical system design and one Object Oriented programming question. Sounds like this is a new thing.
- Only 4 rounds instead of 5. They changed it.
- Made mistakes. Interviewer gave hints.
- Heavy on LPs. 50% of the time spent on LPs. It weights 50% too.
- Got offer a few days after the onsite.

IMPORTANT TIPS:

1. Solve and Re-solve.

(Advice I took from someone else in here, It worked)
Solve leetcode question MULTIPLE TIMES. Look for solved question, if you can't solve it within 15 seconds, add it into your re-solve list.
You see my leetcode stats is 246, but it is actually around 500 if I count the re-solve.

2. This is why we stuck at the interview:

We stuck because we practice leetcode in a perfect condition. Leetcode tells us all the information needed to solve a problem.
During the on-site, only 10% of those are given.
We freak out because we don't know what to do, it leads to brain-freeze.

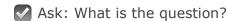Good news. I have developed a methodology to address this.

After the interviewer finished reading out the question, follow this checklist:

☑️ Ask: What is the situation?

Interviewer will give you a vague situation. For example: "given a 2d matrix".
What's in the matrix? Integer? Range of them? Size of the matrix? Sorted?
There was a time when my interviewer's accent was too thick. I didn't understand a
word. And then I stood there, dead inside.
Now I am aware of this and able to deal with it.

Write it down in the comments section.

☑️ Ask: What is the question?

Ok now we understand the data given, what do we want to do? Find the max element?
Delete the max element?
I made this mistake so many times in the past. I solved problems without knowing
what was the actual question.
Yeah it sounds silly, but it happened very often.
There was a time I jumped in and wrote the BFS code, half way thru, I was like "Wait,
what the fuck I am solving?"

Write it down in the commments section.

☑️ Ask: What is the output?

Interviewer won't give you this.
Assume they want to find the max, element in a 2d matrix, do they want to return that
value? Or the position?
Different output might require different ways to solve the same problem.

Write it down in the commments section.

☑️ Ask: Please give me an example.
Interviewer will give a smallest possible example. Ask them how do they come up with
the output.

☑️ Provide your own example.
Work with the interviewer to make sure it is a desired input/output/result.

☑️ Solve with brute force. Use pseudo code inside comment section. Don't write code.
Provide time & memory complexity.

50% of the time, the brute-force solution leads to the optimal solution.
Most dynamic programming questions here can be solved with recursion brute force
and then add memo. Bottom-up dp is actually just a re-write of top-down.
Sliding window, two sum, max container problem, etc.. are actually brute force plus a
reason to "skip".

✅ Now improve it. Speak outloud different solutions to optimize. Write into the comments section. Wait for the "ah hah" from the interviewer.
They will give us feedback whenever we're on the right track.
If you're stuck they will give hint.

"What if I divide and conquer?"
"What if I traverse from the left..?"
"What if I use BFS/DFS?"
"What if I have a function F that solves this problem, can I implement F using F on its subset?"
and so on, speak outloud and wait for the "ah hah"

If you don't speak outloud they won't give hints. Cuz they don't know where you stuck.

For more "what if..", check out https://leetcode.com/discuss/general-discussion/460599/blind-75-leetcode-questions
and https://hackernoon.com/14-patterns-to-ace-any-coding-interview-question-c5bb3357f6ed

✅ Now write the code. In my interviews, I spent 15 mins on all the steps above, only 15 mins to write code.

✅ Dry run the code.
Walk thru your code line by line and spot for mistakes.

✅ After the dry-run, run unit tests by hand. Provide edge cases. Find and fix mistakes.

3. Same with coding questions, I also have a checklist for leadership principles.

Please make sure your answer addresses the following:
✅ STAR method. There was a time when I ....; As the .... I felt ....; What I did was ....; So at the end, ...;
✅ The "Situation" part shows a problem that suitable at my level.
✅ The "Task" part of my answer shows that I took initiative to solve problems, no one asked me to do so, and I do that because I love the customer.
✅ The "Action" part of my answer is specific. Don't lie because interviewer will ask details.
✅ The "Result" part of my answer exceeds the initial expectations.

If your example doesn't complete this checklist, don't use it.

For example:
(SDE II) There was a time my software had a bug. My boss told me to fix it. What I did was to debug it live in prod with console log. So at the end I found the bug and fixed it, my boss was happy.

This is a shit example.

- The scope not suitable for SDE II. As SDE II you must be working on things like curing HIV, not fixing bug.
- You didn't fix it until your boss told you to.
- You didn't mention that you love your customer. Start from the customer and work backward. It's the love to the customer that made you jump in and solve problems that is not yours.
- The bug was fixed as expected. Not enough. You need to exceed the expectations.

4. Practice to speak clamly. In lower tone.

If your interviewer is an introvert, they will speak calmly in lower tone too. This is a good. You won't have any problem.

If your interviewer is an extrovert, they will be pretty vocal. Stay calm, don't try to be the same.

This helps you to stay calmn. Your answers have more weight and interviewer will trust you. All politican practice this.

GOOD LUCK. Thank you leetcode community and all the contributors.