

Technical Interview Tips Valley Consulting Group

Interview Timeline

Initial Phone Screen

Coding Challenge

Phone Interview(s)

Onsite Interview

Offer

Sample Leetcode Outline

D.S. - Arrays #31 Next Perm., #40 Rotate Image, #189 Rotate Array

D.S. - Trees #101 Symmetric Tree, #114 Flatten BT, #235 LCA

D.S. - Stacks/Queues #20 Valid Parentheses, #102 Level Order, #232 Implement

D.S. - Disjoint Sets #547 Friend Circles, (HR) Components in a graph

Algo - Strings #14 Common Prefix, #49 Group Anagram, #125 Palindrome

Algo - Recursion #66 Plus One, #98 Validate BST, #257 Binary Tree Paths

Algo - Search #240 Search 2D Matrix, #695 Island Max Area

Algo - Backtracking #22 Parentheses, #39 Combination Sum, #46 Permutations

Algo - Dynamic #62 Unique Paths, #64 Minimum Path Sum

Additional Resources

LeetCode

Hackerrank

CareerCup

InterviewCake

Cracking the Coding Interview

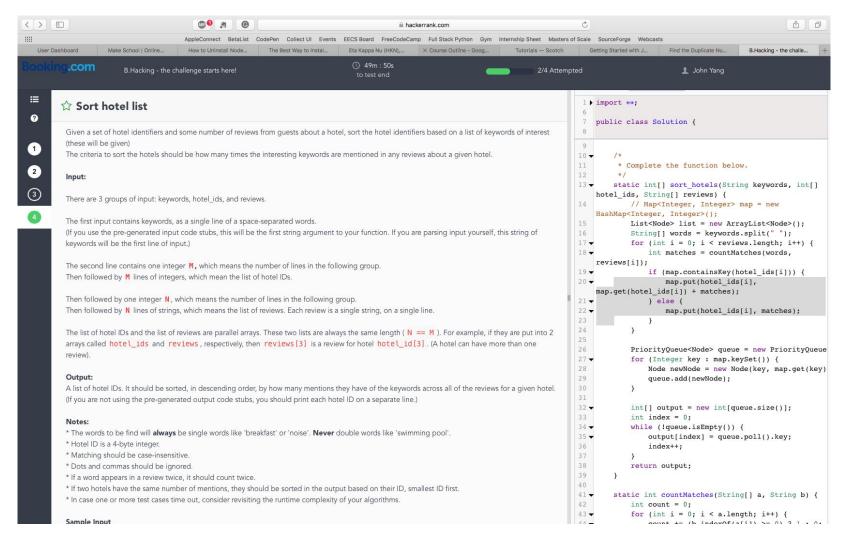
VCG!

Practice, Practice, Practice!

Coding Challenge Tips

- You will only pass this round if your code passes every available test case AND you complete all problems.
- Typically issued through Hackerrank.
- Lasts anywhere between 1 to 3 hours.
- Usually, you can choose your preferred language of choice i.e. Java or Python
- Use Google!!! This is not a homework or project.
 Know how to figure out which search terms get you the right result
- Leetcode Easy to Medium

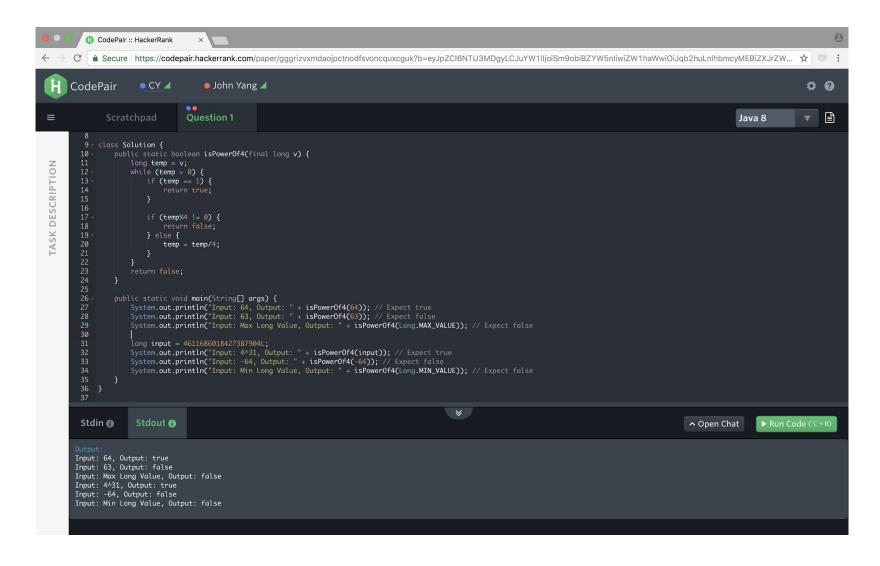
Coding Challenge Tips



- Setting:
 - Clear Phone Connection
 - Relatively quiet space (home, reserved room)
 - Reliable Internet Connection
- Platforms: Codepair, Google Doc, Hackerrank
- Tips on Interacting with Interviewer
 - Ask questions, but don't expect them to be answered and don't get thrown off.
 - Take command, you drive the direction of the interview, not the interviewer.
 - DO NOT code right off the bat, outline your approach first, then start typing.

- Outline of Dialogue:
 - 1. Interviewer introduces themselves + role at the company (2-3 minutes)
 - 2. Introduce yourself (2-3 minutes, school + experience + behavioral question)
 - 3. Technical Portion (30-45 minutes)
 - 4. Questions for the interviewer (never a bad idea to be interested in them!) (3-5 minutes)
- Success in phone interviews varies more than coding challenges, but usually you have to arrive at the correct solution + answer any optimization, testing, or other technical questions correctly.

- Outline of Coding Challenge
 - 1. "Okay, give me a minute to read and understand the problem" (2-3 minutes)
 - 2. "I will talk through my approach, maybe we can discuss it, and if it sounds good, I can start coding?" (3-5 minutes)
 - 3. Implementation Time + Debugging and Refactoring (15-20 minutes)
 - 4. Either A. Interviewer gives you another problem, or B. asks you complexity and space analysis + test cases
- Leetcode Easy to Medium to Hard (Final Round)



Phone Interview Examples

- Optimization
 - Is there an approach that can solve this in faster runtime? (Improve time complexity)
 - Can you cut down on the amount of memory or operations you're using? (reduce space)
 - I've changed the problem slightly, what about your solution changes?
- Test Cases
 - Passes with regular input Test whether your algorithm actually works.
 - Passes with errant input Test whether code handles exceptions and edge cases properly

Onsite Tips

- Setting:
 - 1. At company headquarters!
 - 2. Interact with multiple employees + engineers
 - 3. Learn more about the company
 - 4. Filled with perks! This stage is fun + intense :D
- Typical Schedule
 - o 4-6 Total Interviews:
 - 2-4 Technical Interviews
 - 2-3 Behavioral Interviews
 - Formats: Whiteboard, Collaborative Coding,
 OOP Design, Conversation about previous
 internships + experience

Onsite Tips

- What you can do
 - Not business formal, but don't dress sloppy either! Jeans / Khakis + T-Shirt / Polo + Hoodie / Sweater should be fine.
 - 2. Bring a backpack with copies of your resume, laptop, and pen + paper.
 - 3. Remember contact information! Super helpful for picking a team + staying in touch.
- Other notes
 - Hardest Interview Questions (Medium to Hard)
 - If it doesn't work out this time, email your recruiter for re-interview next year!

Good luck!

https://github.com/valleyconsultinggroup