Company Preparation

Interview Process && Most Asked Questions in Technical interview and OA of -

Just simplified my experience here...

Hope it goona help you all...

Save this pdf and thanks me later

@himanshu_shekhar16

@himanshushekar

Took help of the sites (GFG,leetcode premium,Interviewbit)

Amazon 2- Link
Amazon 2- Link
Microsoft- Link
Adobe - Link

Google Interview process

Online Assessment Round

Online assessment is the process of conducting a test online to gauge the participants' learning and mastery over a particular subject.

3 question have been asked and 75 min alloted.
Difficulty level is Medium
All problems should be done in order to get a call for technical interview rounds

Data Structures and Algorithms Rounds (3 Rounds)

The candidate is asked DS/Algo problems where production ready code might be expected from the candidate. It is not out of the realm of possibility to face minor behavioural questions here as well. The problems range from easy to hard but they are not the sole deciding factor for the final offer. Leadership principles also come into play here. The interviews are conducted on Amazon Chime.

The main focus of these technical rounds are to check problem solving ability of a candidate. Be Prepared it well

HR Round(1 Round)

This is when they ask computer science theory and behavioural questions to the candidate. The questions may enquire about the candidate’s experience at previous companies and conflicts the candidate might have faced with colleagues/managers.

Should prepare all HR questions

Previously Asked Questions

Easy Level

- Find all triplets with zero sum
- Generate all binary strings from given pattern
- Count of strings that can be formed using a, b and c under given constraints
- Find largest word in dictionary by deleting some characters of given string
- Find subarray with given sum | Set 1 (Nonnegative Numbers)
- Find the longest substring with k unique characters in a given string
- Find the two non-repeating elements in an array of repeating elements
- Flood fill Algorithm - how to implement fill() in paint?
- Meta Strings (Check if two strings can become same after a swap in one string)
- Print all Jumping Numbers smaller than or equal to a given value
- Sum of all the numbers that are formed from root to leaf paths
- The Celebrity Problem
- Unbounded Knapsack (Repetition of items allowed)

Medium Level

- Backtracking | Set 7 (Sudoku)
- Boggle | Set 2 (Using Trie)
- Check if a Binary Tree contains duplicate subtrees of size 2 or more
- Dynamic Programming | Set 33 (Find if a string is interleaved of two other stri
- Connect nodes at same level
- Count BST nodes that lie in a given range
- Dynamic Programming | Set 11 (Egg Dropping Puzzle)
- Dynamic Programming | Set 20 (Maximum Length Chain of Pairs)
- Dynamic Programming | Set 22 (Box Stacking Problem)
- Dynamic Programming | Set 27 (Maximum sum rectangle in a 2D matrix)
- Dynamic Programming | Set 28 (Minimum insertions to form a palindrome)
- Dynamic Programming | Set 3 (Longest Increasing Subsequence)
- Dynamic Programming | Set 31 (Optimal Strategy for a Game)
- Dynamic Programming | Set 4 (Longest Common Subsequence)
- Dynamic Programming | Set 5 (Edit Distance)
- Find a pair with given sum in a Balanced BST
- Find the first circular tour that visits all petrol pumps
- Find a triplet that sum to a given value

- Find distance between two given keys of a Binary Tree
- Find all distinct subsets of a given set
- Find the first non-repeating character from a stream of characters
- Find four elements that sum to a given value | Set 2 (O(n^2Logn) Solution)
- Find if a given string can be represented from a substring by iterating the substring “n
- Find k-th smallest element in BST (Order Statistics in BST)
- Dynamic Programming | Set 28 (Minimum insertions to form a palindrome)
- Dynamic Programming | Set 31 (Optimal Strategy for a Game)
- Dynamic Programming | Set 32 (Word Break Problem)
- Find four elements that sum to a given value | Set 2 (O(n^2Logn) Solution)
- Given a matrix of ‘O’ and ‘X’, replace 'O' with 'X' if surrounded by 'X'
- How to print maximum number of A's using given four keys
- Inplace rotate square matrix by 90 degrees | Set 1
- Maximum absolute difference between sum of two contiguous sub-arrays
- Merge two BSTs with limited extra space
- Merge Overlapping Intervals
- Modular Exponentiation (Power in Modular Arithmetic)
- Paper Cut into Minimum Number of Squares | Set 2
- Sum of bit differences among all pairs

Hard Level

- Allocate minimum number of pages
- Given an array arr[], find the maximum j - i such that arr[j] > arr[i]
- Given a sorted dictionary of an alien language, find order of characters
- Hungarian Algorithm for Assignment Problem | Set 1 (Introduction)
- Implement LRU Cache
- Length of the longest valid substring
- Median in a stream of integers (running integers)
- Sum of bit differences among all pairs
- Travelling Salesman Problem | Set 1 (Naive and Dynamic Programming)
- Word Break Problem using Backtracking

Tips for Google Interview Preparation

Now that we know all about the hiring process of Google, here are a few tips which you can use to crack Google's interview and get a job

1. **Understand the work culture at Google well** - It is always good to understand how the company works and what are the things that are expected out of an employee at Google. This shows that you are really interested in working at Google and leaves a good impression on the interviewer as well.
2. **Be Thorough with Data Structures and Algorithms** - At Google, there is always an appreciation for good problem solvers. If you want to have a good impression on the interviewers, the best way is to prove that you have worked a lot on developing your logic structures and solving algorithmic problems. A good understanding of Data Structures and Algorithms and having one or two good projects always earn you brownie points with Amazon.
3. **Use the STAR method to format your Response** - STAR is an acronym for Situation, Task, Action, and Result. The STAR method is a structured way to respond to behavioral based interview questions. To answer a provided question using the STAR method, you start by describing the situation that was at hand, the Task which needed to be done, the action taken by you as a response to the Task, and finally the Result of the experience. It is important to think about all the details and recall everyone and everything that was involved in the situation. Let the interviewer know how much of an impact that experience had on your life and in the lives of all others who were involved. It is always a good practice to be prepared with a real-life story that you can describe using the STAR method.
4. **Know and Describe your Strengths** - Many people who interview at various companies, stay shy during the interviews and feel uncomfortable when they are asked to describe their strengths. Remember that if you do not show how good you are at the skills you know, no one will ever be able to know about the same and this might just cost you a lot. So it is okay to think about yourself and highlight your strengths properly and honestly as and when required.
5. **Discuss with your interviewer and keep the conversation going** - Remember that an interview is not a written exam and therefore even if you come up with the best of solutions for the given problems, it is not worth anything until and unless the interviewer understands what you are trying to say. Therefore, it is important to make the interviewer that he or she is also a part of the interview. Also, asking questions might always prove to be helpful during the interview.