

Round 1 : (Online Assessment)

- Total 4 sections
- 3 sections - MCQ on Time complexity, DS, Algo, DBMS
- 1 section - 4 Coding questions
 - Given an integer n, return the nth Prime number.
 - Given an array of 0's and 1's, return the length of the longest subarray with an equal number of 0's and 1's.
 - Given the preorder and inorder traversal of a tree, return the postorder traversal of the tree.
 - Given an array of integers, return the sum of the maximum sum subarray with only positive integers (including 0).

Round 2 : Technical Round 1 (1 hour)

This round started with introducing myself. Then we had a light discussion on my projects for about 4-5 minutes. Then he asked many questions related to data structures and OOPs concepts.

Questions were like :

- Explain AVL tree.
- Difference between Array and linked lists.
- Binary tree, binary search tree, balanced binary tree.
- Explain local and instance variables by writing code.
- Objects and classes, Inheritance etc.

DSA questions-

1. <https://www.geeksforgeeks.org/maximum-and-minimum-in-an-array/>

He asked me to directly write the code for him as this question was very easy and direct.

2. <https://leetcode.com/problems/find-the-duplicate-number/>

I started with the brute force approach and then went on explaining approaches using sorting and hashmap. There were many follow up questions like what if range is not limited, what if there were more than 1 duplicate number.

3. <https://www.geeksforgeeks.org/find-the-missing-number/>

Again in very few lines I explained to him the naive approach and the one using extra space. I tried explaining to him the approach of using elements as index but he stopped me in between and asked me to write code for what I think is the most efficient approach in 3-4 mins.

Round 3 :: Technical Round 2 (1 hour)

The Round started with introduction then quickly moved to DSA questions.

1. <https://leetcode.com/problems/next-permutation/>

I knew the efficient approach so I quickly explained to her and we moved on to the next question.

2. Given a tree having every node's value as either 0 or 1, the task is to find the maximum size (number of nodes) of the sub-tree in the given tree whose leaf nodes all have value 0.

3. Puzzle- <https://www.geeksforgeeks.org/puzzle-9-find-the-fastest-3-horses/>

Round 4 :: Technical Round 3 (1 hour)

This Round started with introduction and few minutes of project discussion and then he asked me to open my preferred online compiler and started with coding questions-

1. You have 15 Rs with you. You go to a shop and the shopkeeper tells you the price as 1 Rs per chocolate. He also tells you that you can get a chocolate in return for 3 wrappers. How many maximum chocolates can you eat?
Write the generalized code to calculate for any amount.

2. <https://www.geeksforgeeks.org/k-largestor-smallest-elements-in-an-array/>

Then he started asking database related questions like what is normalization, indexing, ACID properties and also asked a few basic programming language questions.

Round 5 :: HR Round (30 mins)

1. Introduce yourself
2. Hobbies
3. Family background
4. All about the company.
5. What I found interesting about the company from the pre placement talk.
6. Why not further studies?

Tips :

- Try not to fake. Only write those things in your resume that you're aware of and are confident enough to answer any question related to it.
- Do your research about the company.
- Stay calm and be positive.