Paytm Interview Experience

Coding Round:

Platform: CoCubes
Language: C, C++, Java, C#
Time: 70 mins
3 Coding Questions

1. Given a number, remove alternate digits from it starting from right to left.
   Input : 12345
   Output : 135
2. Given a MxN matrix, if an element is 1, set its entire row and column to 1. Do it inplace.
3. Find the closest leaf in a Binary Tree

Note:
The IDE doesn't give the option of custom test cases, hence be thorough with the approach. But don't waste much of your time.
Also, the IDE only checks for the sample input cases.

Technical Interview Round 1:

The interviewer was friendly. He began with my introduction and asked me to briefly describe any one of my projects. Then he asked me what all data structures I'm comfortable with and asked me questions accordingly.

Question 1:

Pairwise swap elements of a given linked list

I first explained to him my approach and when he understood the approach he asked me to code it.

Follow-up question:

Write the recursive code for the same question.

Again, I took an example and explained to him my approach and how I'll proceed. Just by my explanation he understood what I'll be coding and so asked me not to code and proceeded to the next question.

Question 2:

Given 2 linked lists, they intersect at some node. Return the length of the linked list which is common in both the linked lists.
Input: list_1 = 1 → 2 → 3 → 4 → 5
list_2 = 9 → 3 → 4 → 5
Output: 3

Explained to him my approach, once he understood, he asked me to code it.

Question 3:

Majority Element

I first gave him the O(N) space approach.
He asked me if we can optimise space to O(1).
I then gave him an O(1) approach and then he asked me to code it.

He asked me if I was comfortable with graphs and then proceeded with the question.

Question 4:

Given a graph, detect a cycle.

I asked him if the graph was directed or undirected. He cleared that it is a directed graph.
I explained to him the approach. He didn't make me code it.

Question 5:

Merge sort vs Quick sort

He wanted the answer in terms of time and space.

Technical Interview Round 2:

The interviewer was very friendly and I had a great time in this interview.
She asked me to share my laptop screen and then she shared links to the questions. The questions were from leetcode. She made sure I had not done those questions earlier by checking my submissions.

Question 1:

917. Reverse Only Letters

I explained to her the approach and she asked me to code it. And then made me submit. It got submitted in one go.

Question 2:

Puzzle 1 | (How to Measure 45 minutes using two identical wires?)

Question 3:

Employee Importance

We had a lot of discussion on this question. First I cleared my doubts. Then I gave her an approach using BFS. She asked me how I will manage to do a quick search for the employees, and I gave the structure of the map. She had some other approach, which had O(N) time complexity. So I explained to her that my approach is better because it will be O(1). Then she asked me why we were using a queue, so I explained to her and finally she was convinced and asked me to write pseudo code for the same.

Technical Interview Round 3:

The interviewer asked me to introduce myself. And then asked to explain any one of my projects. After the explanation of what I had implemented, he asked me the language of implementation and why I went with the choice.
Then he proceeded to the questions.

Question 1:

Program to find whether a no is power of two

He wanted O(1) time complexity.

Question 2:

Root to leaf path sum equal to a given number

Question 3:

Difference between process and thread.

Advice:

- Just keep your calm and have faith in yourself, because chances are you know or can derive the solution to the problems.
- Be expressive. Take examples to explain your approach.
- You should be thorough with time and space complexities.
- Look for corner cases (specially null pointers in case of linked lists).

All the best:)

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