Naveen Rohilla (M.Sc.) - Amazon

Round 1 : Online Assessment
Platform : AMCAT (Good Platform)
 # sections: 4

Section 1 : Debugging Round (7 questions) (Easy) (20 minutes)

Section 2 : Coding Round (2 questions) (70 minutes)

1. **Variation of 2 sum problem.**
2. **https://leetcode.com/problems/sell-diminishing-valued-colored-balls/**

Section 3 : Behavioural (50 questions)
Section 4 : General Aptitude and Reasoning (25 questions) (35 minutes)

Resources used during interviews -

1. Amazon Chime
2. https://codeshare.io/

Common Thing in all interview Rounds :

1. Explain your approach
    a. If the interviewer is satisfied with the approach then he asks for time and space complexities and then asks you to write a production ready code.
    b. If not satisfied, then he asks to optimize your approach.
2. Questions were left ambiguous and it was up to me to clarify them.

Round 2 : Technical Round 1
Time : 60 minutes

Interview started with an introduction.
Then he gave me a link to code share.

1. He asked me if I was aware about BST and asked me to explain it.

    You are provided with the root of BST and 2 nodes **a** and **b**.
    Find and return the maximum element that exists in the path of 2 nodes.

https://www.geeksforgeeks.org/maximum-element-two-nodes-bst/

int findMaximumElement(TreeNode *root, int a, int b)

The nodes **a** and **b** may/may not exist.
If node doesn't exist return -1.

Do it in 1 traversal.

He first asked me to explain my approach. When he was satisfied with my approach he asked me to explain its time and space complexities.
And then he asked me to code it.

Note:

1. Clarify the question properly.
2. I explicitly asked for the function prototype to know its input and output.
3. There is no relationship given between **a** and **b** i.e. (a < b or b < a , etc).

2. https://leetcode.com/problems/group-anagrams/
   He first asked me to explain my approach. When he was satisfied with my approach he asked me to explain its time and space complexities.
   And then he asked me to code it.

   Also he asked me about some sorting algorithms, their complexities.
   Quicksort vs Randomized quicksort (I even told him about their recurrence relation.)

Then the interviewer asked me if I had anything to ask from him .
I asked a few questions.

Round 3 : Technical Round 2
Time : 60 minutes

Interviewer first gave his introduction and asked me to do the same.

1. https://www.geeksforgeeks.org/sum-of-cousins-of-a-given-node-in-a-binary-tree/

2. Given an array of size N with elements in the range [1, N].
   Find all missing elements.
   Array can contain duplicate elements.

   Do it in Time: O(N) and Space: O(1)

3. Project Discussion and behavioural questions.

Then the interviewer asked me if I had anything to ask from him .
I asked a few questions.

Round 4 : Technical Round 3
Time : 60 minutes

Interviewer first gave his introduction and asked me to do the same.

1. A long deep discussion on my projects and behavioural questions.
2. You are given a number.
   11213241
   Convert it to the given form -> One 1, Two 1 and Three 2's and Four 1.

   The question was ambiguous and I asked many questions to understand it.
   1. Read it in pairs of two digits, the first digit represents count and latter a digit.
   2. The input is in string format.
   3. The digits are in the range [1-9].
   4. Keep track of **comma** , **apostrophes** and **and**.

   I did it and then he asked me for a slight variation of the same.

Then the interviewer asked me if I had anything to ask from him .
I asked a few questions.

Points to remember:

1. Prepare well. Anything can be asked in an interview.
2. Do prepare for General Aptitude.
3. Only write those things in your resume that you're aware of and are confident enough to answer any question related to it.
4. Prepare for Behavioural questions.
5. Try to make Interviews like a healthy discussion instead of an exam.
6. Luck matters a lot in the placement process.
