

Amazon Interview Experience for 6-Months Internship

- Difficulty Level : [Hard](#)
- Last Updated : 20 Nov, 2020

Amazon visited our campus (MNIT JAIPUR) for 6 months summer internship programs. Eligible branches were CS, EE and ECE.

Round 1: Online assessment consisting of 4 sections conducted on the AMCAT platform.

Code Debugging: 7 questions C/C++/Java (20 minutes)

Coding: 2 questions (70 minutes)

1. [Merge two sorted linked lists](#)
2. [Check if a binary tree is subtree of another binary tree](#)

Workstyle Assessment: (20 minutes)

Reasoning Ability: 24 questions (35 minutes)

Technical Round 1(90 minutes): First, the interviewer asked me to introduce myself. Then he directly jumps to coding questions.

1.) [Median of Stream of Running Integers using STL](#)

Initially, I told him the brute force approach using insertion sort, explained to him its complexity. Then he told me to optimise it, I gave him solution using min_heap and max_heap. He seems to satisfy, and he told me to code it.

2) He gave me a tree and ask me to print its different views. He said u have a fixed time(30 minutes), have to code this approach.

- Left -view
- Right-View
- Top-View
- Reverse-Top View

3) Implementation Details of

- LRU cache
- LFU cache
- Mixture of LRU cache and LFU cache

Then he jumps to the operating system and asked me about paging, cache, and what the advantage of caching.

Technical Round 2(50 minutes): After a formal introduction, the interviewer directly jump to coding questions:-

Give me a situation of a company, where a hierarchy of manager. A manager can have a different number of employees who are working under him. Now, this employee can have a different number of workers who are working under that employee. This can be up to any level.

He told me to find the youngest common manager of two workers.

Solution: Basically it's a problem of finding a common ancestor in the n-array Tree. Firstly I created an n array tree then gave him 2 approaches

- Using recursion
- First, find the path from the root to that worker and then compare the path and check the node just before the first mismatching node.

2) [How to find Lexicographically previous permutation?](#)

3) Maximum Profit using at-most k-transaction

<https://leetcode.com/problems/best-time-to-buy-and-sell-stock-iv/>

I gave him 2 solutions first one was using recursion and top-down approach and the 2nd one was using the bottom approach.

Finally, the result declared after 10 days and two students were selected for the internship. I was one of them.

Thank you Geeksforgeeks for helping me prepare for my interview.

This article is contributed by **Deepak Kumar**.

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