b'

Amazon Interview Experience for 6 months Intern (On-Campus)

- Difficulty Level :\nMedium
- Last Updated :\n17 Nov, 2020

Amazon conducted 3 rounds.

Round 1: An online assessment that consisted of 4 sections.

1. **Code Debug(20 mins):** It consisted of 6 questions. (Cakewalk)
2. **Work Style assessment(25 mins):** Questions based on Amazon leadership principles
3. **Coding(70 mins):** 2 coding questions
   - Count unique pairs in an array that sum to a given target: https://www.geeksforgeeks.org/count-pairs-with-given-sum/
   - Find if tree S is a subtree of another tree
4. **Logical ability(35 mins):** MCQ based aptitude questions

I was able to solve both the coding questions. 25 students were shortlisted for further rounds.

Round 2: Interview was held on Amazon Chime and LiveCode. The interviewer introduced himself and asked me for the same. After that, 2 coding questions were asked.

1. Implement a LIFO data structure that has the following operations: Push, Pop, GetMiddle, DeleteMiddle.
   I discussed the brute force approach using array along with the time complexities of all functions. Then, he told me to improve the time complexity of DeleteMiddle function. So, I told an approach to use HashMap. The interviewer said to make my own hashmap instead of relying on language. I was not able to come up with a solution. I was asked to code.
2. Pattern-based question:

   ```
   1\r\n11\r\n21\r\n1211\r\n111221\r\n\r\n
   ```

   I was not able to recognize the pattern.\xc2\xa0

Round 3: Interview was held on the same platform. I introduced myself. 3 coding questions were asked in this round.

1. Given an integer array, find all the numbers which don\xe2\x80\x99t have a greater element on its right.
   I explained brute force solution and time complexity(TC: O(n^2), SC: O(1)). The interviewer asked to improve time complexity. I told an O(n) TC solution with O(n) space. We moved on to the next question. I coded the solution.
2. Given an array of stock prices, perform 2 queries.
   - Change the value of the stock at ith index
   - Find minimum stock price within a given range
     I told brute force solution with O(1) and O(n) TC respectively. I was not able to tell the optimal solution for the second query.
3. HOD of your college is supposed to give gifts to students.
   Input Parameters: n(number of students), List of edges represting friends, k(cost of a gift)
   If HOD gives gifts to student A, he will also have to give gifts to all the students whom A considers as his/her friend. If A considers B as his/her friend, it\xe2\x80\x99s not necessary that B considers A as his/her friend. Find the minimum cost HOD will have to spend.

For example, if A\xe2\x80\x99s friend is B and B\xe2\x80\x99s friend is C, 3 gifts have to be given.
I told a solution based on DFS. I was asked to code. After explaining the code, he said there\xe2\x80\x99s also an optimal approach. But, we were running out of time. So, he asked if I had any questions.

5 students were selected.

Verdict: Rejected

My Personal Notes\n*arrow_drop_up*

Add your personal notes her

Save

'