On-Campus Amazon Interview Experience (Aug-Sept 2021)

Interviewee : Anurag Joshi (MCA, Batch-2022)

Online Assessment Round

OA round breakage is as follows:

1. Debugging - 7 questions (20 mins)
2. DSA coding - 2 questions (70 mins)
    a. Maximum Units on a Truck
    b. Goldman Sachs | OA | Turnstile
3. Workstyle Assessment - 50+ questions (Untimed)
4. Aptitude/Reasoning - 24 questions (35 mins)

Technical Round 1

1. Tell me about yourself
2. Group the People Given the Group Size They Belong To
3. Follow up on the previous question - Now, suppose each of the n people need to go to some city. Provided a ***city*** array of size n having destination cityId (integer) for each person. Return the list of groups where the destination cityId for all people in each group must be the same
4. Find the Celebrity Problem

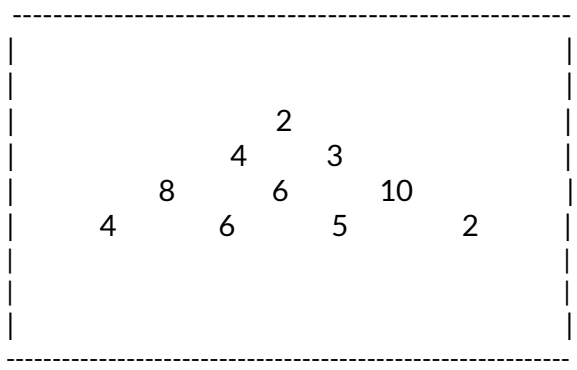
Technical Round 2

1. Introduction and project discussion
2. Design a stack with operations on middle element. Discussion on different approaches, all approaches' pros and cons. Asked to implement only the deleteMiddle method
3. Longest word chain from a list of words. Approach I took was to first convert the problem into a graph (where there is a directed edge from word A to word B iff last character of A matches with the first character of B), then finding out the length of the longest path in the graph. Asked to implement the whole code. Then discussion on time and space complexity.
4. Behavioral question: Tell me about the most challenging project you ever did. What were the challenges you faced? How did you solve them?

Technical Round 3

1. Brief introduction
2. Maximum path sum in a triangle.
3. Follow up: The input for the above problem will be given in a flat .txt file. You have to first parse the input efficiently and store it in an appropriate data structure, then solve the problem.

Input.txt :



(In my opinion) Other than being able to solve the whole problem, primarily what the interviewer wanted to see was - whether or not I could : Take care of all kinds of errors that could arise while parsing and solving the problem. Handle all edge cases. Keeping the code clean and modular with good variable naming convention and comments.