

Microsoft Interview Experience Internship | On-Campus

- Last Updated : 26 Aug, 2021

Process: Online Test followed by 2 Rounds of interviews

Online Test: Platform Codility

2 coding problems in 90 minutes (1 Easy + 1 Medium)

Shortlisting criteria: Students who solved 2 problems completely, and had CGPA 9+(for boys) and 8+(for girls) were called for interviews. The cutoff for CGPA depends on the students in the college.

Platform for interviews- MS teams + Codility

Round: 1 Interview Technical

Time 45 minutes

1. Firstly, the interviewer asked the approaches of both the problems in the online test
2. Next, he gave a coding Problem: <https://leetcode.com/problems/restore-ip-addresses/>
3. Next to the coding problem-

Given an array with elements that can be positive, negative, or zero. Find the maximum subset-sum of elements that you can make from the given array such that for every two consecutive elements in the array, at least one of the elements is present in our subset.

Solution :

Take $dp[i][0]$ = maximum subset sum that can be made till i th index, such that I don't take the i th element

$dp[i][1]$ = maximum subset sum that can be made till i th index, such that I take the i th element

Recurrence- $dp[i][0] = dp[i-1][1]$

$dp[i][1] = \max(dp[i-1][0], dp[i-1][1]) + A[i]$

Final answer = $\max(dp[n][0], dp[n][1])$

Proof of why greedy fails, and why you are applying DP, has to be provided.

Suggestion:

- Make clarifications regarding all corner cases, or conditions, well in advance.
- Focus on writing clean, and correct code, as the interviewer asks to run the code for various test-cases on the Codility platform.
- Was asked to shorten the code, so that it looks much cleaner.
- Your way and structured style of programming are judged.
- The interviewer told me at the beginning of the interview only that I needed to solve atleast 2 problems in the given time to be eligible for selection, and doing more problems would be a bonus. So make use of the time wisely!

Round 2: Interview [Technical+ HR]

- The interview was taken by a senior Principal Group Eng Manager at Microsoft.
- Introduction followed by a discussion about the most challenging project/work you have done.
- The discussion about the project went for about 15 minutes.
- Next, he asked about a coding problem, and I was asked to code it to the Codility platform.

Problem: Given a binary tree, find the number of same-value subtrees in the given binary tree. A same-value subtree is a subtree in which all nodes have the same value.

- Next, he asked about Threads and Processes, and semaphores in Operating Systems.
- The interview ended with some basic questions about myself, which one has to answer confidently.

Suggestion :

- Try to make eye contact and interact well with the interviewer. He has come to hire you and not to reject you.
- Even if you don't know something, an honest try, with confidence is what the interviewer wants.
- Your attitude and confidence while handling questions are what matters the most.

My Personal Notes

Add your personal notes here

Save