Microsoft IDC Internship Interview Experience

Difficulty Level :\nMedium
Last Updated :\n05 Aug, 2019

Microsoft visited our campus \xc2\xa0in the start of August for hiring interns for Microsoft IDC Bengaluru/Hyderabad.All students having cgpa > 7 were shortlisted for the first round.

Round 1:\xc2\xa0

The first round was a coding round conducted on mettl.com\xc2\xa0 for 1.5 hrs.It consisted of 3 questions which were:-

- 1. You are given n sticks with differing lengths. You can either increase the length of the stick or decrease it. An array of costs was also provided where the ith entry signified the cost for increasing or decreasing the length of the ith stick by 1 unit. You had to make all the sticks of equal length and ensure minimum cost was incurred while doing this.
- 2. You were given 2 strings A and B.B was a sentence and we had to find all the words in B which had A as their prefix string. For eg: A = \xe2\x80\x9cSan\xe2\x80\x9d \xc2\xa0B=\xe2\x80\x9dSandy Hook has lot of sand\xe2\x80\x9d. \xc2\xa0Output will be \xe2\x80\x9cSandy, Sand\xe2\x80\x9d
- 3. 2 people A and B are fighting each other. They attack each other equal no. of times .B respects A and never performs and extra attack before A i.e. at all times no. of attacks by A are >= attacks by B. You were given a string where each character denoted the attack by A or B. You had to make minimum modifications to this string to make sure that above mentioned constraints are satisfied .For eg: Given \xe2\x80\x9cBBBB\xe2\x80\x9d we had to make two modifications and convert it to \xe2\x80\x9cABAB\xe2\x80\x9d.

The IDE was unlike the one at gfg and hackerearth and prior practice on this ide would be very helpful .Everyone got different questions and they had different marking schemes so there was no definitive cutoff.60 students were shortlisted for the next round.

Round 2:\xc2\xa0

This was a group flyer round for 1 hr in which we had to write code for 2 question :-

- 1. Given a time in HH:MM format rearrange digits of the time to get the next closest time possible. You could use any of the digits any no. of times. For eg given \xe2\x80\x9c09:31\xe2\x80\x9d the output would be \xe2\x80\x9c09:33\xe2\x80\x9d .
- 2. Find <u>diameter of binary tree</u>. This path might or might not pass through the root node.

The code should be written neatly(proper indentation, variable names) with comments in appropriate places. The time complexity should be mentioned and sample test case had to be written and run on the code. I was able to solve 1 question but followed all the rules above and was selected. 20 students were shortlisted for the next round.

Round 3:

It was a technical interview where 2 questions were asked :-

- 1. Given a string identify if its a valid IP address. You can find this question here.
- 2. Given 2 positions in matrix find whether path exists between them. You can find this question here\xc2\xa0.

Round 4:

It was a technical interview where I was asked to implement a <u>Sudoku-Solver</u> and calculate time complexity of the Backtracking approach. In case of interviews, keep telling the interviewers your approach as you formulate your solution. Write code in a neat way and if you identify a mistake in your code then tell the interviewer and correct it. 11 students were shortlisted for the next round including me.

Round 5:

This was a HR round in which questions were asked from the resum\xc3\xa8.I had to explain all the projects that I did and asked him of the projects being done at Microsoft. The interview was very general with no technical questions asked.

Finally, 5 students were shortlisted for the internship on the basis of last 3 rounds. I was also selected. I would like to thank GFG for my success and would request aspirants to regularly do GFG practice in order to get internship at companies like Microsoft.

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