

Microsoft Interview Experience | Set 65 (On-Campus for Internship IT and IDC)

- Difficulty Level : \n[Medium](#)
- Last Updated : \n09 Mar, 2016

Microsoft visited our campus for hiring FTE\\x80\x99s and Interns. I had opted for both Microsoft IT and IDC. The first couple of rounds were online rounds and were hosted on Cocubes.com

Round 1

It comprised of 15 MCQ Questions and time allotted was 30 mins. Every student had a unique set of questions which comprised of C,C++ (I/O), Data Structures, Java, and Aptitude. The questions required a decent amount of thinking.

Round 2 (Online Coding)

1. You are given a matrix of dimensions $m \times n$ where each cell in the matrix can have values 0,1 or 2 which has the following meaning :

0:empty cell

1:cells have fresh oranges

2:cells have rotten oranges

So we have to determine what is the minimum time required so that all the oranges will be rotten. A rotten orange at index $[i,j]$ can rot other fresh orange at indexes $[i+1,j]$, $[i,j+1]$, $[i-1,j]$, $[i,j-1]$. If it is impossible to rot every orange then simply return -1.

This was to be done without allocating any extra space.

2. Connect all leaf nodes of a binary tree to make a LL. (Without allocating any extra space for the linked list).

Now, around 30 students were shortlisted for Microsoft IT and around 40 for IDC. There were some people who got short listed for both. I was lucky enough to sit for both of them.

From here I will write the processes for IDC and IT separately.

FOR IT

Round 3(Group Fly Round)

Some people who had a high score in the 1st and 2nd rounds did not have to appear this round. They were promoted for the next rounds.

There were two questions.

1. Given a string (Assume that its case insensitive and has no spaces), find the length of the largest palindromic substring.
While the brute force solution would have $O(n^2)$ complexity, with some thinking you can arrive at a $O(n^2)$ solution.
2. Given a string , return the length of the longest substring which comprises of consecutive characters.
Ex: abcxy
Output:
3
abc

Discuss your approach with your mentors and be very clear about it. Write comments on the paper code.

Round 4 (Technical PI)

The interviewer was nice and made me feel extremely confident. He went through my resume and asked me a few basic questions on data structures that we use. Also know the efficiency of using each data structure and there pros and cons.

He first asked me to write a code to implement the Evaluate Function of Microsoft Excel. I gave him the solution where we convert the expression from infix to postfix and then evaluate the postfix expression. However, I was aware that this solution would not work for 2 digit number (or results). So I suggested an improvement by taking input as a string and then converting the string into an integer. The interviewer was satisfied with the logic.

He then asked me if I knew anything about encryption. Though I didn't have a very clear idea but I told him about some ciphers that can be used.

I had only one project on my resume. We had a 15 minute discussion of the challenges faced in making it and how it could be further improved.

The interview lasted for around 40-45 mins.

Round 5 (As Appropriate AA)

Now people who did relatively well in the previous technical round qualified for this.

The interviewer was again very warm. Though my CGPA was high, it kept decreasing every semester. He asked me the reason for this.

Then we discussed about my experience and work at one of the earlier places that I had interned. And he asked a few other questions like Why Microsoft? and What I can do to improve Microsoft?

Just be honest and confident about what you speak. And this round should go smooth.

FOR IDC

It followed a very similar structure like the IT interviews. The interviews here focused more on coding and databases. There were two Technical PI rounds instead of one after the group fly round.

The question tested the fundamentals and data structures.

There was a question on implementing a data structure to store a word along with all of its acronyms from a dictionary such that we can search it efficiently.

Thanks to GeeksforGeeks for building such a repository. I have learned a lot from this forum in the last one year. Awesome platform. And I would urge others who gain from this platform to contribute their experiences as well.

Cheers.

If you like GeeksforGeeks and would like to contribute, you can also write an article and mail your article to contribute@geeksforgeeks.org. See your article appearing on the GeeksforGeeks main page and help other Geeks

[All Practice Problems for Microsoft !](#)

My Personal Notes

Add your personal notes here

Save

