

Microsoft Interview Experience 2019 | Off-Campus Software Engineering Internship (Hyderabad)

- Difficulty Level : \n[Easy](#)
- Last Updated : \n27 Mar, 2019

Microsoft conducted an all India drive for hiring SDE Interns (Minimum CGPA was 7 and no backlogs were allowed). They conducted a coding round in which people who solved 3 got a call or people who solved 2 and had a higher CGPA (+9) also received a call. Girls solving one problem were called for on site interview.

Coding Round Questions:

1. \xc2\xa0<https://www.geeksforgeeks.org/remove-duplicates-from-a-given-string/>

2. \xc2\xa0 It consisted of 2 parts :

a) \xc2\xa0<https://www.geeksforgeeks.org/construct-tree-inorder-level-order-traversals/>

b) \xc2\xa0<https://www.geeksforgeeks.org/find-minimum-depth-of-a-binary-tree/>

3. I don't remember the question but it was based on disjoint set concept.

I solved two and third was partial.

Round 1: \xc2\xa0It was a group fly round where there were around 54 candidates. They gave us 40 minutes and four problems to solve. The four problems are as follows:

1) \xc2\xa0 Predict the output of a given program.

2) \xc2\xa0<https://www.geeksforgeeks.org/sum-array-elements-using-recursion/>

3) \xc2\xa0<https://www.geeksforgeeks.org/pairwise-swap-adjacent-nodes-of-a-linked-list-by-changing-pointers-set-2/>

4) Given a matrix of size $n \times m$. fill in the matrix in the form of level order traversal of tree. For example:

for a 4×4 matrix u should fill it as:

1 \xc2\xa0 \xc2\xa0 \xc2\xa0 2 \xc2\xa0 \xc2\xa0 \xc2\xa0 6 \xc2\xa0 \xc2\xa0 \xc2\xa0 \xc2\xa0 7

3 \xc2\xa0 \xc2\xa0 \xc2\xa0 \xc2\xa0 5 \xc2\xa0 \xc2\xa0 \xc2\xa0 8 \xc2\xa0 \xc2\xa0 \xc2\xa0 13

4 \xc2\xa0 \xc2\xa0 \xc2\xa0 \xc2\xa0 9 \xc2\xa0 \xc2\xa0 \xc2\xa0 12 \xc2\xa0 \xc2\xa0 \xc2\xa0 14

10 \xc2\xa0 \xc2\xa0 \xc2\xa0 11 \xc2\xa0 \xc2\xa0 15 \xc2\xa0 \xc2\xa0 \xc2\xa0 16

There were 15 people who were selected for the next round.

I solved three questions and was among 15.

(Tip: write clearly without cuts and first explain your approach and then write your code with proper variable names. Make sure to add comments in between your code for better explanation and at last

write the time complexity for that code).

Round 2:

It was a personal interview which was taken by two interviewers. They were really nice and gave a lot of time to discuss on. We had a long discussion on the my projects that I did. They asked me the algorithms used and the libraries and the functions in deep. They also asked me how could I do the same without functions and other stuffs. It went for around 20 minutes. The next 15 minutes had a problem discussion in which I was asked coding problems such as

<https://www.geeksforgeeks.org/remove-duplicates-from-a-given-string/>

<https://www.geeksforgeeks.org/lru-cache-implementation/>

I gave a solution using map. They later asked me to implement set or map, which I was able to do. I was asked operating system questions on deadlock, starvation, multiprocessing and multithreading and many more.

At last he asked me a simple question on strings.

<https://www.geeksforgeeks.org/delete-a-linked-list-node-at-a-given-position/>

After lunch, they informed that I made it to the third round. Around 10 made it to next round.

(Tip: Be confident on what you say and stick to it. They just see your confidence and approach)

Round 3:

The interviewer was of young age and seemed to be nice from the beginning. He asked me about my brief introduction and then started asking coding problems which were

1) Write a code to find minimum distance between two nodes in a tree.

2) <https://www.geeksforgeeks.org/stock-buy-sell/>

3) <https://www.geeksforgeeks.org/given-an-array-of-numbers-arrange-the-numbers-to-form-the-biggest-number/>

this was given with a condition : not to use comparator function.

Be prepared to cover all the conditions and write all the test cases for your solution. After this I was asked to debug some problems and then I was asked about my projects.

About 10 minutes later I was informed that I was selected for HR .

Round 4(HR):

First he asked to introduce myself in brief. Then he gave me a string coding questions. I solved it with all conditions mentioned and gave me various approaches. He was satisfied. After that he asked me about my projects, what I learnt from it and many other .

After that he asked me if I have any questions for him. Guys don't say no. Just ask anything that is worth asking . He just sees how curious you are to know about the company.

With this I cleared all rounds and they selected 4 and took our resume. After 15 days, I received a mail stating that I am selected.

Thanks to geeksforgeeks team for putting such good content on website. I would advice to go through problems on website as it improves thinking and approach. It helped me a lot in every thing be it subjects, coding problems or practicing the questions.

My Personal Notes\ *narrow_drop_up*

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