# Microsoft Interview Experience | Set 158 (On-Campus)

Difficulty Level :\nMedium
Last Updated :\n21 Dec, 2017

Microsoft visited our campus. Before that, about a month ago they had conducted an online coding test. The interview consisted of 3 f2f rounds.

#### Online test:

The test comprised of 3 coding questions. The questions were not same for everyone. I was the winner of Microsoft Code. Fun. Do so I was directly qualified for group fly round.

## **Group Fly**

Question 1 \xe2\x80\x93 Connect every node to next right node. If any node is the rightmost node of that level, then connect it to leftmost node of next level.

Extra marks for constant space and test cases.

Similar to this:

https://www.geeksforgeeks.org/connect-nodes-at-same-level-with-o1-extra-space/

Question 2 \xe2\x80\x93 Find pairs for given sum in a sorted singly linked list without extra space.

Extra marks for constant space.

Similar to this:

https://www.geeksforgeeks.org/find-pair-given-sum-sorted-singly-linked-without-extra-space/

### Round 1:

About my branch.

Basic OS concepts like PCB. What does it store?

Threads. Multithreading. Is there any entity which is different for every thread? What are those entities?

Two nodes of a BST are swapped, correct the BST

https://www.geeksforgeeks.org/fix-two-swapped-nodes-of-bst/

He asked for test cases. I gave 7-8 test cases. He was impressed by those test cases. Full code was expected.

### Round 2:

He saw my branch and gave me a mathematical problem.

https://puzzling.stackexchange.com/questions/11998/1-2-3-4-5-6-7-8-9-100

Delete n nodes after m nodes of a linked list

https://www.geeksforgeeks.org/delete-n-nodes-after-m-nodes-of-a-linked-list/

How is your college life? Will you miss it?

#### Round 3:

What do you want to do in future?

System Design : Given a Client-Server model, How will you handle a large number of requests coming?

We discussed this for 15 mins. I made few diagrams and told about scalability and concurrency. (involved both DBMS and OS) How we handle concurrency?

I told him about mutex and semaphore.

https://www.geeksforgeeks.org/swap-bits-in-a-given-number/

He seemed happy. Asked me if I had any questions. Explained about his work at Microsoft.

It took close to 2 hours for all three rounds. Straight after the 3rd round, HR took me to her room and with a huge smile said you are a very prominent candidate and you have made it.

xc2xa0

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