# Microsoft Interview Experience for Azure Team Hyderabad

• Difficulty Level :\nMedium

Last Updated :\n31 Mar, 2020

Interview was for Azure team IDC Hyderabad. Total 9 candidates came.

#### Round 1:\xc2\xa0

```
2->7->8->11

|
13->16->17->21

|
22->23->27->29

|
30->32
```

Sorted Linked List given like above where each node has 2 pointers left and down. For each row starting nodes down points to next row start. Each row has 4 elements, except last one which can have <= 4 elements. Next rows start element is greater than previous rows end element. We need to design and code for it insert of new value at correct place\xc2\xa0and delete operation. 8 went for next round.

### Round 2:

- 1. What is memory hierarchy?
- 2. Difference in virtual ans physical memory?
- 3. How cache works?
- 4. What are different algorithms to insert value in cache if value is not found?
- 5. Threads accessing same variable at same time. How on processor level they are assigned value?
- 6. Implement LRU algorithm for cache. I did in O(cache\_size). Was expecting more optimal approach.
- 7. Write from scratch hash function. Even if key is integer, string, etc. Handle in O(1) time. And mapping to value also with as less memory as possible.

#### Round 3:

- 1. Implement Billing design in cloud. Any 3rd party can use it and implement there billing system.
- 2. Write Singleton class implementation.
- 3. \xc2\xa0Stock-Time problem. Given stocks according to time. We need to tell when we can buy stock. So we never get loss and write all test case for it.
- 4. Implement Post Order Traversal.
- 5. Why Microsoft? 4 were selected for Managerial round.

## Managerial:

1. When we click + button in chrome and new tab opens what all happens.

Implement memcopy from scratch in c when source, destination pointer given. Where as size from source also given. I used for loop and de-reference copy. Forgot to implement corner case if destination pointer within source block which we are copying. Got Rejected.
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Save