

TRUMINDS INTERVIEW EXPERIENCE

SHUJA MOMIN - MCA(2019-2022)

There were a total of 3 rounds and each round was Elimination round.

Round 1 - ONLINE ASSESMENT (13 September)

Time - 75 minutes

Platform - HackerEarth

1. 16 MCQ based on OS, CS fundamentals, Aptitude and Output based questions.

2. Coding Question:

You are given a list that contains N strings of lowercase English alphabets. Any number of contiguous strings can be grouped together to form a new string. The grouping function accepts two integers L and R and concatenate all string between indices L and R (inclusive) and returns a modified string in which the alphabets of the concatenated string are sorted.

Task is to find the k-th character in the concatenated string.

Example:

- N=3
- Str=[abcc,trea,zape]
- L=2, R=3, k=5
- Conctenated string : treazape
- Insorted order: aaeprtz
- 5th character is p

Round 2 : TECHNICAL INTERVIEW (14 September)

TIME : 60 minutes

Platform : Microsoft Teams

1. Operating Systems:

- a) What is Virtual Memory, Demand Paging, Page faults?

- b) What are schedulers. Describe all types of schedulers ?
- c) What are Semaphores?
- d) What is thrashing?
- e) Difference between Process and Thread.

2. DSA:

He asked me about the data structures I was familiar with then he asked me the following questions:

- a) Detailed discussion on Stack and Queues
(Implementation, Operations and Applications).
Reverse the elements of the stack.
- b) Binary trees, Binary search trees and AVL trees.
- c) Tree Traversal Techniques.
- d) Height of a binary tree.
- e) DFS and BFS of tree. Which technique is to be used for building family tree and why?

3. Projects:

Detailed discussion on 2 of my Projects.

Difference between append and extend methods in python.

Round 3 - LEADERSHIP INTERVIEW(15 September)

Time: 40 minutes

Platform : Microsoft Teams

- Started with my introduction.
- What are Linked List, Difference between Singly and Doubly Linked List.
- You are provided with the head pointer of the singly and the doubly Linked List and the reference pointer of a node to be deleted. In which case the deletion is effective and why?
- Small discussion on Tress (AVL Trees).
- Puzzle:
You and your friend are moving around the circumference of a park with radius 'r' and started moving from same point with speed v_1 and v_2 respectively with $v_1 > v_2$. How

many times you and your friend will cross each other in time 't'.

- Discussion on one of my Android based projects. He also asked me to present.
- Print "HELLO WORLD" without writing anything in the main function.

[This can be done by writing the print statement in the constructor. When the object is created the statement will be called automatically].

Follow up question:

How will you create the object?

- What are friend functions?
- What are sockets?
- UDP vs TCP. Which technique Microsoft Teams is using?
- How processes communicate.
- MCA vs MSc.
- Family background.

Tips:

1. Be sure to have in-depth knowledge of everything in your resume.
2. Prepare CS topics thoroughly along with DSA.
3. Make sure to ask questions at the end.
4. Be confident.

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