

Microsoft Intern Interview Experience

About me: I am Kashyap☺ B.E.CSE, 2009-13 batch!

July 22, 2011: It was the day of the Microsoft written test! PPT @ 9AM. (the first thing that came to my mind – “Lab bunk :P”). After listening to boring talks for 4 hours, lunch :D Microsoft was kind enough to provide us with snacks! :P

3 PM – Written test starts!

It went on for 1 and half hours.. Came to know that the results will be out only on Monday☹ Finally results were out only on Tuesday! I was 5th out of the 20 shortlisted for the interview☺

Interview @ Anna Univ Guest house – July 26, 2011

All the interviewers first wanted me to introduce myself. They asked me what I like and such stuff!

Round 1

- Given an array of 0s and 1s, **segregate**(not sort) the 0s and 1s in that array

Soln: The solution is very simple☺ Use two pointers, one for 0s and other for 1s. It was a simple algorithm! He wanted me to write a working code on paper!

Time Complexity: $O(N)$

- He made things a little tough by adding 2s to the array. So, now the array consists of 0s 1s and 2s and like before, you have to **segregate** the 0s 1s and 2s.

Soln: Use 3 pointers, one each for 0s 1s and 2s. He just wanted me to explain my logic. He didn't want me to code it!

Time Complexity: $O(N)$

Round 2

He asked me to tell about some **interesting** problem which I have solved! ☺ I told him about a problem I had solved in [SPOJ](#). He wanted me to explain how I solved it!

- Given a sorted list, remove the duplicates in the list using no extra memory space

Soln: A sorted list as apparent is very easy! Just a 3 line code which he wanted me to write in paper ☺

- Now, he wanted me to remove duplicates in an unsorted list (which I had come across already)

Soln: Instead of using a separate bool array, u can use the sign bits of the numbers of the array ☺

Round 3 (Oru 5 mins break kuda vidala ☹)

He said, “No more data structures questions for u :P”. He asked me what all subjects I’ve done till now. I just gave him the list (Digital, OS, CA, Micro.....). He asked me, which do you like the most ☺ I said “OS, CA, Micro”. He started :P.

- What do you know about Cache?

My ans: Cache stores data to avoid memory accesses.....etc etc. Then, I told him about write-through and write-back cache. He asked me the advantages of both methods. He asked me when write-through would be better and when write-back will be better. All these were pretty easy questions ☺ He then was talking about disk caches and why disk accesses are costlier!

Then...

- He gave me 3 choices Physics, Maths, Puzzles. He wanted me to choose one area where he can question me :P I was thinking of Maths/Puzzles. Finally said Maths (I was thinking “why the hell did I choose math?! :P”) Then he

started talking about “Mean value theorem” , “Continuous functions”. He then gave me a question to solve! He was kind enough to help me to solve it☺ So, Finally... I solved it!!! :D

I waited in the lobby (or however u call it☺) for 10-15 mins chatting with my friends. Then a lady called my name and said “Congratulations! We are offering you an intern at Microsoft!”

“Habbada!!!!!!!!!! :D :D”