

# ACCOLITE INTERVIEW EXPERIENCE: SDE-1

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M.C.A (2018–2021)

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DAY 1 : 27<sup>th</sup> August 2020

### Round 1: Aptitude Test

Platform : EduThrill

No. of Questions : 30 MCQ

Test Duration : 30 minutes

\* No negative marking.

**Questions would be related to CS concepts & Programming and overall Aptitude.**

- |                  |                     |
|------------------|---------------------|
| 1. OOPs Concepts | 2. Operating System |
| 3. Networking    | 4. Data Structures  |
| 5. DBMS          |                     |

**Tip:** It is advisable to practice on EduThrill app as questions get repeated.

### Round 2: Online Coding Test

Platform : CodeAnalyzer

No. of Question : 1

Test Duration : 60 minutes

#### Problem:

Given a list of coins, father needs to distribute them amongst his three children.

Complete the function to return 1 if the coins can be distributed so that each receive equal value of money from father, else 0.

#### Example:

- S = [4, 2, 3, 5, 1]  
Output: 1 // [1,4][2,3][5]
- S = [2, 5, 1, 6, 10, 8]  
Output: 0

**Tip:** Try not to compile frequently as it takes a lot of time to get compiled/run.

\* Both Rounds were Elimination Rounds.

## DAY 2 : 28<sup>th</sup> August 2020

### Technical Round 1: (9:15 AM - 10:15 AM)

Platform : Skype, Notepad++

Test Duration : 1 hour

1. The interview started with a brief introduction.

2. **Programming Question 1:**

Given a directed graph, find any one Mother Vertex in a graph G.

Mother Vertex : A vertex in a graph such that all other vertices in graph can be reached from that vertex

Link: <https://www.geeksforgeeks.org/find-a-mother-vertex-in-a-graph/>

Discussion:

- So I told him my approach which was basically based on DFS, and he was satisfied with my approach and asked me to write the code.
- He also asked me to use native arrays instead of using vectors or any STL containers.
- And in the end, he asked the time complexity & the space complexity of my program.

Note : Try to write a clean code & **modularise** your program as much as you can do.

3. **Programming Question 2:**

Given a key value, insert a node in a Binary Search Tree.

He asked me to write the code. I asked him some questions related to it.

for eg : Do we have to write the structure of the node, Do we have to return a value, what would be the data type of the key value.

Link: <https://www.geeksforgeeks.org/binary-search-tree-set-1-search-and-insertion/>

4. **Programming Question 3:**

Given a rope of length n, divide the rope in different parts in such a way that maximise the product of lengths of all parts.

**Examples:**

- Input: n = 3 , max product would be ( 1\*2 )

Link: <https://www.geeksforgeeks.org/maximum-product-cutting-dp-36/>

### Discussion:

- I already knew the approach for this question, as it was similar to [Rod Cutting Problem](#).
- So I started, by telling him the brute force approach, after which he asked me if we can optimise it further.
- Then I told him the optimised approach using **Dynamic Programming**.
- He was satisfied with the approach and asked me the time complexity.

5. In the end he asked me to explain Abstraction.

**Note :** *Try to explain your code while coding, so that you both are on the same page.*

## Technical Round 2: (11:00AM-11.30AM)

Platform : Skype

Test Duration : 30 minutes

1. Interview started with a brief Introduction and asked me about the status of corona in Delhi.
2. Then he asked me if I have done any internships or not, and asked me about the placement status in our college.
3. Then he asked me to briefly explain all the **projects** I have mentioned in my CV, and asked me to explain my other project which was based on *Socket Programming* and what all *challenges* I faced.

**Follow-up Question :** *If your code is running on your laptop, and the same code is giving an error on your friend's laptop, how would you resolve the error from the coding point of view?*

4. After the discussion, he asked me about my job location preference.

He ended with, if I have any questions to which I questioned him about:

- *How's the work culture at Accolite?*
- *Products and technology he has recently worked upon?*
- *Do freshers get an opportunity to work on a major project?*

For further queries, contact me @ [sanyamjain.mca18.du@gmail.com](mailto:sanyamjain.mca18.du@gmail.com)

Happy to Help!

## Good Luck!