

**Vandana Yadav (MCA 2020-23)**  
**Cvent Interview Experience (Intern + FTE) [5-10 Aug 2022 ]**

**Round 1.1 (Online assessment)**

5 August 2022

This was an elimination round, those selected can give coding test held on same day. It was MCQ round having 30 questions based on c++, java, file handling, error finding, general aptitude (percentage, average, age) on the wheebox platform.

Nearly 100 participated in this and 63 got selected for the next round.

**Round 1.2 (Coding Round)**

5 August 2022

Given two arrays representing players standing in two rows. Now we want to choose a team to play. we will choose players from left to right, and the index of each chosen player (excluding the first one taken) will be strictly greater than the index of the previously chosen player. To avoid giving preference to one of the rows, we choose students in such a way that no consecutive chosen students belong to the same row. The first student can be chosen among all  $2n$  students (there are no additional constraints), and a team can consist of any number of students.

We have to choose students in such a way, that the total height of all chosen students is maximum possible. Find the maximum possible total height of players in a team we can choose. (There was a limit of only 50 compilations at max)

1	16	2	0	43
4	2	7	2	0

find the max sum value (by iterating the whole array) you could get if you could choose any value from array at index 'i' such that  $1 \leq i \leq n$  (size of array) but can't choose both values from the same index. Ex: Can't pick 1 and 4 to make value 5, as they are of the same index '1' And I can't choose a value from one array simultaneously. Ex: You can't choose values 1 and 16 from array 1 to sum 17 as they are in the same array, same for array 2.

There are many ways to make sum with these constraint, Ex:  $1 + 2 + 2 + 43 = 48$   
Or  $4 + 16 + 2 + 2 + 43 = 67$ .

**Round 2.1 (On-site)**

7 August 2022

Interview was scheduled for two days dividing students in batches.

This was technical round (started around 1.00 pm)

I was asked to introduce myself. Then describe about projects, and some simple questions were asked like aim of choosing this as project, did you check accuracy of API data before using it in project.

I gave satisfactory answer to these question (give truthful answers only, which can be explained if required)

I was asked some dbms questions and SQL queries.

Difference between SQL and PostgreSQL, which is more advanced? (As I mentioned PostgreSQL in resume)

Explain different joins in SQL. (I explained with diagrams)

What are triggers?

Write two SQL queries substring from a string (say Vandana), 5<sup>th</sup> highest salary of an employee.

Then I was asked DSA questions (We were asked to use pen paper for coding)).

**Write a program to print Fibonacci series upto N using recursion, then there were some questions related to recursion.**

Explain all sorting algorithms you know, one line each ( Eg Bubble Sort: Bubble out largest element to end)

**Explain merge sort in detail, and write optimized code for it.**

**Given an array find closest element to 0.**

<https://leetcode.com/problems/find-closest-number-to-zero/>

At last I was asked if I have any questions I asked some questions about foreign opportunities in cvent, what tech-stack is used in cvent generally.

There were total 26 student in on-site round. My batch had 7 students scheduled for that day, 3 students reached next round.

## **Round 2.2**

7 August 2022

My interviewer's name was Meenakshi Dahiya working as Engineering manager and had nearly 10 years of experience.

She begin with asking, how are you, introduce yourself, how is college life going, Do you guys share questions asked in interview after the interview, I said some do, some do not depends person to person. I do share after interview process is completed.

Then she give a DSA problem to me

**Given a string find first occurrence of non-repeating character of string**

Eg str= "abcbaafe"      ans='e'      //e is only non repeating character

<https://www.geeksforgeeks.org/given-a-string-find-its-first-non-repeating-character/>

I was not new to the problem , I started with naïve solution and gave a map based solution to a problem , I explained every detail of my solution and run it on example test case neatly with confidence.

Then I was asked a few puzzles

There are 3 ants sitting on three corners of a triangle. All ants randomly pick a direction and start moving along edge of the triangle. What is the probability that any two ants collide?

[https://www.geeksforgeeks.org/puzzle-21-3-ants-and-triangle/#:~:text=1\)%20All%20ants%20move%20in,2%20don't%20cause%20collision.](https://www.geeksforgeeks.org/puzzle-21-3-ants-and-triangle/#:~:text=1)%20All%20ants%20move%20in,2%20don't%20cause%20collision.)

You are blindfolded and 10 coins are placed in front of you on the table. You are allowed to touch

the coins but can't tell which way up they are by feel. You are told that there are 5 coins head up, and 5 coins tails up but not which ones are which. Can you make two piles of coins each with the same number of heads up? You can flip the coins any number of times.

<https://www.geeksforgeeks.org/puzzle-24-10-coins-puzzle/>

There are 10 stacks of 10 identical-looking coins. All of the coins in one of these stacks are counterfeit, and all the coins in the other stacks are genuine. Every genuine coin weighs 10 grams, and every fake weighs 11 grams. You have an analytical scale that can determine the exact weight of any number of coins. What is the minimum number of weighings needed to identify the stack with the fake coins? (ans: 1 )

<https://www.quora.com/There-are-10-stacks-of-10-coins-each-Each-coin-weighs-10-gms-However-one-stack-of-coins-is-defective-and-each-coin-in-that-stack-weights-only-9-gms-What-is-the-minimum-number-of-weights-you-need-to-take-to-find>

**Given a sentence say “there is one chair two table, and three people in one room ..” print occurrence of number name eg “one”, “two”, ... , “nine” (range 1 to 9)**

I gave a simple linear time solution which compares a every word of sentence with nine number names

Then some OOPS concept questions were asked

What do you understand by oops?

What is abstraction?

What is encapsulation?

What is runtime and compile time polymorphism?

What is difference between interfaces and abstract classes?

Then I was asked DBMS questions

Given a student and teacher relationship (M:N) what is minimum numbers of tables required to represent it?

Write a query to print all departments which do not have any employee in it.

7 students were selected for (Intern + FTE)

### **INTERVIEW TIPS**

1. Keep your basics strong (oops, dbms, SQL queries) they matter a lot along with DSA.
2. You should know to code sorting algorithms, every data structure from scratch (Linked List etc) many students were asked to implement there own data structure.
3. Make projects on your own, even if the idea is old try to implement some new feature which is your own.
4. Whatever you have written on your resume, make sure you know everything about it (basic atleast).