Cvent Interview Experience

Himani

16 August 2021

1 Round 1: Aptitude Test

- Number of Questions: 30
- Time: 1 Hour
- The questions were based on C/C++/Java, DBMS, OOPS, SQL Queries, and basic Aptitude. There was no negative marking in this round.

2 Round 2: Coding Test

- Time: 1 Hour
- Platform: Codility

Problem Statement Given a rectangular grid containing houses built in some cells, find the number of empty cells at a distance of at most K to every house.

A retail store chain wants to expand into a new neighborhood. To maximize the number of clients, the new branch should be at a distance of no more than K from all the houses in the neighborhood. A is a matrix of size N x M, representing the neighborhood as a rectangular grid, in which each cell is either an integer 0 (an empty plot) or 1 (a house). The distance between two cells is calculated as the minimum number of cell borders (regardless of whether the cells on the way are empty or occupied) that one has to cross to move from the source to the target cell (without moving through corners). A store can be only built on an empty plot. How many suitable locations are there?

For example, given K = 2 and matrix A = [[0, 0, 0, 0], [0, 0, 1, 0], [1, 0, 0, 1]], houses are located in cells with coordinates (2, 3), (3, 1) and (3, 4). We can build a new store on two empty plots that are close enough to all the houses. The first possible empty plot is located at (3, 2). The distance to the first house at (2,3) is 2, the distance to the second house at (3, 1) is 1, and the third house at (3, 4) is at a distance of 2. The second possible empty plot is located at (3, 3). The distances to the first, second and third houses are respectively, 1, 2 and 1.

A[1] = 0000, A[2] = 0010, A[3] = 1001. Cells at a distance of less than or equal to 2 from all houses are marked in yellow.

Write a function:

def solution(K, A)

which, given a positive integer K and matrix A of size N x M, returns the number of empty plots that are close enough to all the houses.

3 Technical Interview Round 1

Sir begin with basic introduction; asked me about background, study and coding language in which i am comforted. then begin with OOPs basic and DSA.

3.1 question 1

- What is Encapsulation and Abstraction?

3.2 question 2

- check wether given number is a perfect square or not using addition and subtraction only.
- I was confused but tried to gave a solution then he asked me to find pattern in perfect squares.Then code for the same And its time complexity.

3.3 question 3

- What is a linked list? Why we use linked list.
- Find and delete n-th node from end of a linked list.
- I gave him an approach and he was satisfied with that.

3.4 question 4

- Given an array of integers, find the maximum sum of a contiguous subarray.
- I gave two approaches, He find second one good and asked to code that.

4 Technical Interview Round 2

Sir was friendly, to make me feel comforted in interview he started asking about M.Sc. and previous rounds of placement drive. Then moved to DSA.

4.1 DSA

- Given an array of size N , an integer k s.t. $0 < k < n$
- we make subarrays as 0 to k-1 , 1 to k , 2 to k+1 and so on, find
  - number of subarrays formed
  - minimum element in all subarrays
- I gave him example and then answered question 1 using those examples.
- then started with part 2,I first proposed brute force approach with its time complexity.
- then priority queue based approach with explanation for its time.
- So he asked me to code this one on codility platform..

4.2 Database

- Given a select query with multiple joins, returning a resultset with 10000 rows and 100 columns returning result in 30ms. find the opportunities to minimize the time for execution.
- I started proposing some things which i thought would be right but he denied and repeated the question.
- then i asked him to help me out to reach the solution but he denied and dropped the question.

4.3 Project Discussion

- He asked me to describe my projects.
- Some cross questions were asked.

4.4 Puzzles

- Given an n*n chess board, find maximum number of bishops you can place on it so that they do not kill each other.
- I took around 5 to 10 mins to come up with the solution but the main part was that i was taking examples in notebook and continuously speaking what I was trying to do.

After it he asked me if I have some question for him, So I asked about work environment.

5 CCAT: Criteria Cognitive Aptitude Test

It was divided in two sections:

5.1 Aptitude Test(22 Minutes, 50 MCQs)

- It covered basic verbal, math and logic, and spatial reasoning.
- No negative marking. Try to attempt as many questions as possible.

5.2 Personality Test(no time limit, 140 MCQs)

- Questions will repeat, so do not lie while answering.