

ACCOLITE INTERVIEW EXPERIENCE

Okay, So I will try to remember as much as I can to help all you guys :P

Round 1 (MCQ)

It had 20 questions to be done in 30 mins filled mostly with technical questions from DS and Algorithms and a few questions on Quant, DBMS and networking (1 or 2 each not many).

I suggest doing geeks quiz of these topics as you study them or a few days before the company visits the campus because questions can be repetitive.

Round 2 (Written Coding on paper)

It had only 1 question to be done in 30 mins.

Everyone selected in the 1st round were supposed to code this question unlike the previous year format.

Write a function `getBuildOrder (String project)` which will take a project name as a parameter and return the build order of the projects.

You can use an inbuilt function `getDependencies (String project)` which takes project name as a parameter and returns a list of projects which it depends on.

For Example:

Project Dependencies are:

A -> B, C, D

B -> D

C -> D, E

D -> E

E -> empty (no dependencies)

So now if `getBuildOrder ("A")` is called, then output can be either

E, D, C, B, A

Or

E, D, B, C, A

Here `getDependencies ("A")` returns `{"B","C","D"}` then this means that B, C, D projects will come before A in the build order.

Also, assume no cycles are present, if A is dependent on B then B should not be dependent on A.

Round 3 (Technical Interview)

It started with the usual tell me about yourself.

Then I was given a question that given a binary tree finds its vertical sum. (Solution on [geeksforgeeks](https://www.geeksforgeeks.org/)).

Next question was given a linked list where every node has an arbitrary pointer apart from the next pointer. We want the arbitrary pointer for every node to point to the maximum element on the right of that node. It was supposed to be done in $O(n)$ time.

I did it through recursion easily so he changed it to you can't use recursion, so I gave another solution of reversing the linked list then iterating over it to set the arbitrary values so he again changed it now to you can't perform reverse function so I gave him another solution without reversing by finding the local maxima and continuing.

Then he asked me one last question where you are given the birth year and death year of different animals.

For example:

Birth Year	Death Year
2001	2005
2002	2010
2005	2010
2009	2012

Now we need to find the period where most animals were alive at one time.

Here the answer would be 2009 – 2010 where 3 animals were alive. Kind of like finding maximum overlaps in the intervals.

Then he asked another question were given an year finding the number of animals alive in that year.

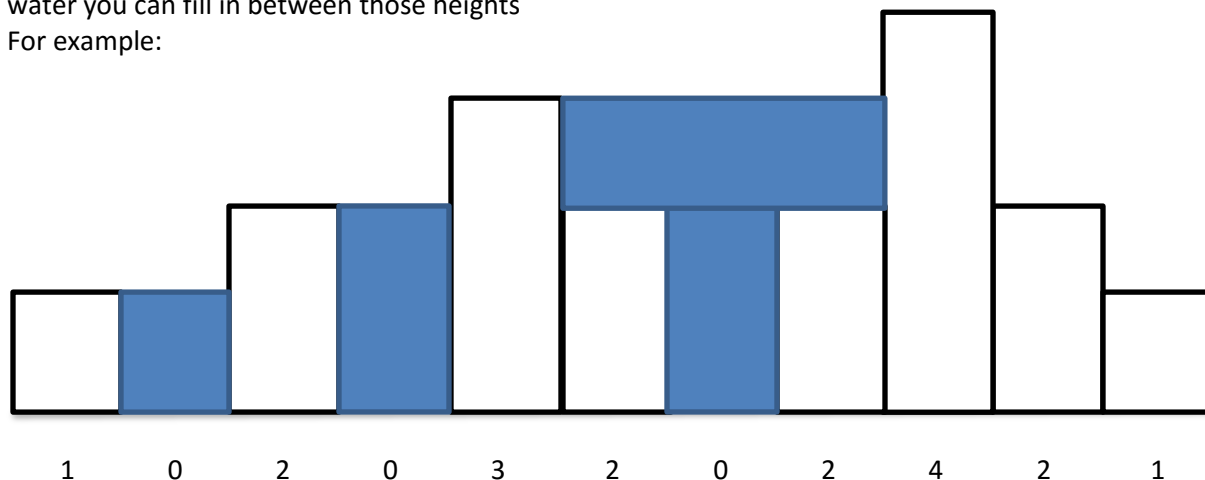
The typical solution would be to just check for each animal but if we had to search this m times where m is very very large then your time complexity increases so how to bring that down.

Round 4 (Technical Interview)

Started with a how do you see yourself in the next 10 years?

Next question was given an array where each element represents the heights find how much volume of water you can fill in between those heights

For example:



So the volume here is 8. (Blue is the water you filled :P)

Next question was given two linked list which merge at one point, find the merging point.
(Solution on [geeksforgeeks](#))

Final question was that you are having a party where you need to give wine glasses to everyone as they arrive and take it back when they leave. So minimize the number of wine glasses you need to buy.

For example:

Arrival Time	Depart Time
1	4
2	3
3	7
5	9

Solution is 2. Almost similar to the animals question.

Round 5 (HR)

Went for only 10 mins where I was asked typical questions like why accolite and what job location would you prefer and why. Also a few questions regarding my resume were asked on the co-curricular activities I had done.

Round 6 (Technical + HR)

This round was something new as we hadn't expected any more rounds. Here they gave a question where they simply wanted to see how much you could think when it comes to data structures.

First question was given an array having marks of every student you have to distribute candies to every student such that a student getting more marks than his neighbors gets more candies.

Every student should get at least one candy and you have to minimize the number of candies distributed in total.

Now coming to that question I was talking about consider a url `abc.com/category1/productid1`

You need to display the top ten categories and top 10 products in each category at any point of time.

Users who opened a particular link increment the count of the category and the product.

I used a 2 hash maps and 2 maxheaps to get to the solution but finally came up with 2 tree maps (java container) where you won't even require using the max heaps.

In between they also asked about how is hashing implemented internally and its collision resolution techniques to see even if the person understands hashing.

Finally a few more hr questions were asked like why accolite and how do you relate yourself to accolite?