Placement Interview Experience

Name: Astha Singh

Department: Computer Science and Technology

Batch: 2022

Company Name: Deutsche Bank

Job Role: Graduate Analyst

Domain of Your Role: Software Development

Cut-off: Not Specified

Interview Process*(How many rounds were there and what were the rounds?)*: 1 coding round + 4 interview

Questions asked in the each stage of the process:

Round 1:

3 coding questions were there.

Round 2 (Technical Interview 1, 45 minutes):

Interviewer started with the question, "Tell me about yourself".

After that he asked me to explain the projects in my CV in not more than 5 minutes.

Then he started asking questions on subjects we have had in our course:

1. What is the difference between procedural language and Object Oriented Programming? Which one is faster? Which one is better/easy to use? Which one is more close to real life?
2. Why are most of the compilers written in C?
3. What is Object Oriented Programming and why is it used?
4. Explain the concepts. (Classes, Objects, Abstraction, Encapsulation, Inheritance, Polymorphism).
5. Types of Inheritance and asked me to explain it by writing codes for it.

6. Types of Polymorphism, Function Overloading, Function Overriding, Operator Overloading.
7. Virtual Function, vptr, vtable.
8. Sorting Algorithms and their time complexities.
9. Write a program for level order insertion in binary tree.
10. What is the difference between DBMS and RDBMS, which is easy to implement, and which is faster?
11. What are the data structures used in DBMS?
12. Write a query to find a salary greater than k?

Time was over then he asked me whether I mind if he asked few more questions, I said no, then he asked these:

13. What is the difference between stacks, queues and linked lists? (He basically wanted to hear that linked list is physical data structure and stacks/queues are logical data structure)
14. What is the difference between a linear and non linear Linked list? Types of linked list. Give an example for application of each type of linked list.
15. Then he asked to write a few more SQL queries.
16. What is a deadlock? Conditions for deadlock. Can it be avoided?
17. What are mutually exclusive processes?
18. ACID property.

I had JavaScript in my CV, so he asked questions from JavaScript

19. What is NaN? What will it return if we call isNaN("Astha")?
20. What does bind() method do in JS?
21. Scope and Scope chain.
22. this pointer
23. Arrow functions and their advantages.
24. Difference between "=="and "===" operators.
25. Type coercion
26. Difference between var, let and constant.

Then he asked me why I haven't learnt Java and when I get in DB, if I have to work on Java, how long will it take me to learn it?

What is your favourite language and why?

Then he asked me to ask a question.
I asked what would be the professional growth and learning graph in DB.

Round 3 (Technical Interview, 45 minutes):

Interviewer asked me to introduce myself in less than 50 words.

I had ML project in my CV so he asked questions like:

1. What is the label and feature? Explain with examples.
2. What is BBN, Naive Bayes Classifier?
3. What is CNN and RNN? Give one difference?

Then he asked questions on my web development project. The motive behind it.

Then he dived into subjects:
4. What is an array and linked list? When do we use an array and when do we use a linked list?
5. Write a program to find the second largest element in a linked list.
6. Write a program to find the intersection of two linked lists.
7. Properties of RDBMS.
8. How are tables related in RDBMS?
9. What are joins, explain their types? Then he asked me to write queries for different scenarios where different types of joins were used.
10. GROUP BY, ORDER BY and HAVING.

45 minutes were up so he asked me to ask a question

I asked what is the one thing he loved most about working in DB.
He said work life balance.

Round 3(Professional Fitment Round, 30 minutes):

He asked how my day was and did I enjoy the interview process.

Interviewer introduced himself, he was a senior member in DB and then asked me to introduce myself without using academic aspects of my life.

Then he asked a lot of questions on my research paper and then on my web development project and why I chose to make that project.

Apart from the ones on my CV, what other projects I have done and what are the technologies I know and have worked with.

Then he asked me about my previous internship, my work and what I learnt there that would stay with me forever.

Then he asked me two puzzles.
1. https://www.geeksforgeeks.org/puzzle-11-1000-coins-and-10-bags/
2. https://www.geeksforgeeks.org/puzzle-9-find-the-fastest-3-horses/

Then he asked my idea of growth and learning.

At last he asked me to ask a question, I asked him about his idea of success.

Round 4 (HR, 15 minutes)

Started with the interviewer introducing himself and asking me about my day.

Asked me to introduce myself and asked about my family and pandemic effects on me.

Then he asked me whether I have ever worked on team projects.

Then he asked me, suppose you are leading a project and one of your teammates isn't delivering on time/ not working, how will you handle the situation.

Then he asked, Why DB?

Then he asked me to ask a question.
I asked, Why DB for him?

Reason behind selection results*(Which skills helped you the most to get the job?)*: I was asked questions on pretty much everything. Know about your projects, that would help.

Preparation Strategy*(How did you prepare for the non-interview rounds? How did your preparation evolve for the interview rounds?)*:
For non interview rounds, practice cp, as much as you can.
For interview rounds, focus on core subjects and most important DSA.

Resources to prepare from -
    Necessary Resources*(Must Do)*:
    Practice DSA on leetcode.
    Study DBMS, OS and Computer Networks
    Have some good projects on CV

    Advanced Resources*(Can Do)*:
    Learn Java if you have time.

Anything else that you'd like to share with the students:
Make Object oriented Programming a strong part of your curriculum.

Pay interest in DBMS class. Learn the minute details of DBMS. I learnt from a prof of IIT KGP on YouTube.

Have a good knowledge of OS.

Then the most important, of course, DSA.
Do as many problems as you can do on leetcode.
Leetcode is the best platform to prepare for an interview.

Reach out to your seniors if you need it because I did many times and I am blessed with some amazing seniors, they always helped me.

Add a few projects on your CV, in that way, Interviewer gets something to talk about and they will ask you questions to which you will know the answer.

Also, for your internship interviews, a tip, don't try to show the interviewer that you know everything but try to show that you want to know everything.