Company: Airoha Technology
Name : Aniket Rajput

Online Assessment:

Corrct Answer : +1
Wrong Answer: -0.25

The first part was an online test with different types of questions about topics like Data Structures, Operating Systems, Aptitude, and C programming. The DSA and operating system questions were easy for me, but I found the aptitude section a bit tricky. The C programming questions were important and I felt comfortable with them, though they took more time. I could solve almost all the DSA questions except one, and I managed the operating system and some of the aptitude questions too. Out of 25 C questions, I could answer around 20 due to lack of time. These questions were long and needed time. Unfortunately, because I didn't have enough time, I could only complete around 48 out of 60 questions.

Technical Round 1 :

The interview began with a quick introduction.

The interviewer asked questions based on the resume.

I discussed deploying my project on AWS EC2, and the interviewer checked all the project functionalities.

Because my projects used Spring, Hibernate, and Java, the interviewer noted that I had worked with higher-level languages, while they use C.

The interviewer then presented a coding question in C.

The task was to replace all occurrences of a given pattern in an original string with a new pattern.

I found this question easy in languages like C++ and Java, but it was more challenging in C.

The interviewer provided a main function and another function called from the main.

The provided code structure was such that the task needed to be done in-place.

After observing the structure of the provied driver code, I suggested a change due to certain issues in provided code.

The interviewer asked why I felt the need for a change.

I explained that since the original string occupied contiguous memory and the output could be longer, doing it in-place might not work well. Even using realloc to increase contiguous space doesn't guarantee the same start address after resizing.

The interviewer agreed to the change.

I presented three solutions: returning a new block pointer, passing char ** instead of char *, and directly printing in the given function.

The interviewer allowed me to choose, and I opted for the third approach.

s_length : original string length

p_length : pattern length

t_length : new pattern length

In worst scenario output can occupy

s_length * t_length (bytes)

Worst case :

original string is : aaaa
pattern : a
new pattern : aniket
output would contains 4*6 = 24 bytes

I dynamically allocated space of s_length * t_length (bytes) for the result using malloc.

Wrote code of the question then after placing \0 at the end of output block shrinken the extra space left over in the output block using realloc.

Provided code was correct.

The interview shifted to computer network questions.

I was asked about protocols layer by layer, starting from the Application layer and reaching ICMP protocol at the Network layer.

When asked about ICMP, I gave a concise response due to limited knowledge.

To steer the interview, I started listing data link layer protocols.

Advice: If you know a bit about a fundamental question, try to guide the interview towards familiar topics to avoid cross-questioning.

The interview concluded with an invitation to ask questions about the company, and I posed a few inquiries.

Technical Round 2:

The interview began with a quick introduction. The interviewer asked me to present documentation and a Data Flow Diagram (DFD) of my project.

I mentioned that I hadn't prepared those due to my heavy college workload.

The interviewer then requested to see my source code and asked me to explain where the execution of the project begins.

Confidently, I elaborated on my project's code for more than 25 minutes.

In-between interviewer asked about used DBMS SCHEMA and SIZE OF ATTRIBUTES

Next, the interviewer inquired whether I had implemented exception handling and dealt with edge cases in my project.

I confirmed that I had.

The interviewer instructed me to execute my project and tested it with various edge cases.

Later, I was asked about the process of resolving IP addresses from source to destination.

I managed to provide a correct explanation for this.

The interviewer presented Java and C/C++ code snippets and asked me to predict their outputs.

The Java questions pertained to Multithreading, Method Resolution Rules, and Runtime Polymorphism.

The C/C++ questions involved Pointers, Loops, switch cases, and the use of 'break' statements.

I successfully answered these questions, even though the output prediction tasks proved to be quite challenging.

HR Round:

1) Introduce Yourself
2) Strength
3) Weakness
4) What are your skills?
5) What is your habit ?
6) Tell me about your family
7) What do you do whenever you feel low.
8) Have you ever experienced work load , share that experience
9) Why do you want to join our company
10) In which domain AIROHA works
11) Tell me about MediaTek
12) Tell me any 5 semiconductor companies
13) What is your dream company
14) What would you do if you have offers from other companies ? Would you leave our company or not .