Qualcomm Interview | Set 2

Difficulty Level :\nExpertLast Updated :\n19 Jul, 2019

It was a very good experience to face interview at Qualcomm.

I have attended the interview for a position of Embedded SW application developer and my experience and my expertise is on C/RTOS/Data structures in telecom domain.

Process: 1 Telephonic, 5 Technical, 1 HR round (each of 40min to 1 hr).

All rounds were not that much tough and interviewers were very friendly in talking.

Telephonic:

- · All about your CV
- · Lots of questions on project and how it works actually
- · OS concepts and real examples
- Deadlock situations (detection, prevention)
- Sw watchdog timers
- OS schedulers and algos
- Error handling in the system, Core dumps, etc
- · Memory management concepts
- IPC communications
- Mutex/critical section/semaphores

Note: All questions were asked deeply and need to tell him until he convinced with the answers.

After 2 days I got a call to come down to Qcom office for next rounds. That day went long..!!

Round 1:

- · Basics of C programming
- · Memory map of program, Storage classes and their mapping
- If we declare more number of variables than the registers available on the processor? Where they will be stored.
- IPC (signal, as I coded in this) how actually it does transfer of memory
 Set of C code snippets given to debug \xe2\x80\xa6 Identify problems in it and tell outputs

And further questions on that.. like why?

Round 2:

- · Basic C questions
- Write a program to Delete a node, given only a pointer to the node in a Circular linked list
- How to access data in the called functions after returning from it (point here is that, cannot access auto variables in functions after it is being called off)
- Write a program to return a stream of bytes from a function
- · Lots of questions on Function pointers, how, usage, examples

Round 3:

- · Generic questions on project they are doing , how market values are there , what products are coming
- Memory handling in SIM cards/embedded applications
- · Priorities of OS programs, process and thread differences
- · How to handle the Generic functions, like Void pointers

Round 4:

- Write a own program for strstr function, optimal way
- Write a program to convert a given single Linked list to BST
- How a software development happens and what you do if you were given a product to develop
- Project questions
- · How do you want to see yourself after a year, you intentions, aspirations

Round 5:

- Big & Little endian \xe2\x80\x93 definitions, representations, write it down, swap them, etc
- · Lots of memory related questions
- Write a program to implement memcpy() on your own \xe2\x80\x93
- Need to evaluate many other conditions like overlap situations and etc.,
- Difference between library call and a system call

· Priority inversion in a RTOS and its solutions

Round 6 (HR):

Qualcomm aspirations, culture and how you look to be next, feedback from us on the interview, Nothing much\xe2\x80\xa6 just a
casual talk.

Note: All rounds, you need to explain about your project clearly and they can ask some really good questions from project. Be out and out clear with your projects and CV.

All interviewers will explain about the position you have applied for and it is good if you ask more questions on what exactly they do and how it works.

I did these interviews very good but unfortunately I was not into the Qualcomm after this. But they considered for another position and within a month I got another call and again 3 rounds of Technical Interviews as below,

Process: 3 Technical

Round 1:

- Network Traffic measurements
- · Udp vs tcp, diff
- · Os schedulers
- Timer module code // you need to write code for the timer module which actually handles timeout functionality for all clients and execute handlers of client at timeout. (things they looked for are how you design a given problem, callback functions, function pointers,etc)
- · Questions on Call back functions
- · Questions on function pointers
- Program to Reverse a single linked list
- Program to Detect loop in a single linked list
- Detect errors in pgm below

Round\xc2\xa02:

- Project details deeply
- · lpc, os schedulers
- Prioritized processes, weighted round robin
- sw wdog
- Memory management
- Mem leaks & corresponding tools
- · Buffer overflows and impacts/problems from that
- · Deadlock, methods to avoid, prevent, etc
- · Semaphore, mutex, busy wait
- code for memcpy and problems, covering all error scenarios.

Round\xc2\xa03:

- Stack corruption
- Hacking through stack smashing
- Program debug
- · Priority Inversion,ex
- Race conditions, ex
- Semaphore, mutex, ex
- Strcmp, pgm,ff ends it
- Arbit linked list pgm
- Memcpy pgm, possibilities like overlapped memory address copy.
- · Small general DI puzzle
- Pointer subtraction

After this I was actually into my Dream Company and Happy..!!

I would sincerely Thank GeeksforGeeks very helpful in my preparation and hope this would be useful for other aspirants.

Many Many congratulations to the author. If you like GeeksforGeeks and would like to contribute, you can also write an article and mail your article to contribute@geeksforgeeks.org. See your article appearing on the GeeksforGeeks main page and help other Geeks.

All Practice Problems for Qualcomm!

My Personal Notes\narrow drop up

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