Company Name: Qualcomm

- Written Test: there was online written test consist of 3 sections...
- 1st was aptitude section that was quite tough. 2 questions were data based question for example "5 friends having 5 different dogs and some relevant data".there were 20 question and cutoff was 7.
- 2nd was c objective question.all are easy.
- 3rd was technical objective questions were from os ,nw,ds,algo.level was easy
- In 2nd and 3rd section easily u can do 15 15 ques.
- Negative marking was there.

First technical interview:

- interview was fully based on networking concept.
- question were mostly from transport layer, network layer study well to crack.
- study from gate notes for both network layer and transport layer
- other question were mixed of dll,mac,dns,switching,arp,rarp...
- little bit of project.
- overview of your mtech subject.

hint to crack:-if u dnt know the answer try to make them sure that u know the concept but forgot because of long duration.

• second technical interview:

- started with matrix multiplication program, then one string program then linked list program.all easy one.
- secondly asked os concept little bit depth needed to answer confidentially.
- little bit socket programming
- tries a lot to de motivate.two times asked me to go if i want.

HR interview:

asked about family background, weakness, gap years, and other simple questions

Company Name: Microsoft

<u>Written Test</u>: Basic C and technical aptitude

Coding Round: questions on array manipulation and binary tree.

Group Task: After clearing both rounds, the selected students were given codes to implement on paper and they check it manually.

- 1. find out LCA in a given binary tree.
- 2. array manipulation
- 3. find duplicates in a string and print the string after removing the duplicates.

Interview:

Concepts of Web Services, DBMS, DS, Code - Linked list

// interview experience of another student

to be filled....

Company Name: Citicorp

Written Test: Basic Aptitude, Reasoning, C.

Coding: // codes in coding file sent to you

Interview: SQL,SQL and more SQL

Puzzles

// other students experience to be added

Company Name: Freescale Semiconductors

Written Test: basic C, apti (60 questions in 60 minutes)

No coding Round

Interview:

• First round:

- a. In this round they asked about basics of C and Unix Internals.
- b. OS concepts, Networking

Second Round :

- Same topics as above plus DS, algo.
- o Programming concepts like memory leak and dangling pointers are asked.
- Area of interest and questions in that area. (I said Embedded Programming and he asked few embedded concepts like what are embedded systems, microcontrollers, in which language i code and few others)

Third Round :

- Unix internals, like difference between user space and kernel space and similar stuff
- Little bit of HR stuff, like my college, school, GATE, area of interest.
- My complete resume was discussed though he didn't get much :-p

// more experience of other students

Company Name: Riverbed Technology

Written Test: C aptitude, general aptitude, Unix, OS, Networks basics(37 questions in 60 minutes)

//Coding questions in coding doc

Interview:

Round 1:

- Discuss the codes in coding round and ask for modification to make your code more efficient. Ask to correct the error(if any) in your codes.
- B.Tech Projects
- Socket Programming basics
- One dynamic programming question to code(on paper)
- Bitwise operators and a question to code(on paper) using them.

Round 2: (HR)

- General HR stuff.
- B.Tech Project
- Asked about my area of interest. After that she asked what if I get a job in a company
 which is offering me job in the same profile as the area of my interest. (Prepare your
 answer according to your area of interest and company profile as this is the most asked
 HR question)
- Then for about 15-20 min she did all the talking and i just nod.

Round 3:

- first question was what are your fav subjects(he was looking for OS and networks only. I said OS, Unix Internals, Basic Networking, Socket Programming, Wireless and mobile networking)
- After that he asked what all system calls i know.(Try to tell as much as you can, I told him about 10-12 system calls. He was writing down everything). Then he asked about few of them.
- proc structure and u area in unix.
- Difference between program and process. Process Life cycle.
- Process Context (including PCB)
- Virtual Memory concept and its need. Then he asked that if my process size is not bigger than the RAM and i can store whole process at a time, even then do we need virtual memory.
- Difference between malloc, calloc and realloc.
- Asked about IPC (i told him **shared memory** and system calls used in shared memory including semaphores and **message passing** including MPI calls)
- pthread library functions
- After that he switched to networking and asked about how the data goes from source to destination (I told him the entire scenario starting from private network, DNS, proxy server,NAT, Routing, all layers header, intermediate changes in the data header at each router and other things)
- then he asked about congestion control.(I told him each and every thing i know about that. Explanation with diagram :-))
- then next question was about debugging a very large C-program which is crashing after sometime. we are not supposed to see the code for dry run nor we can debug it using qdb step by step.(Soln : Use qdb with Core Dump file)
- Asked that if I am comfortable with relocating to bangalore and why?

Round 4:

- B.Tech Project
- M.Tech Project and current status of my project
- C++ (OOPS) concept (Virtual, Abstract, Inheritance)
- Basic C programming concepts like which data structure would i prefer to store thousands of values and insertion time is O(1). After this, in the same data structure if i need to do search in O(k) time, k<<n, then which DS would i prefer.
- Concepts of hashing and how to implement it.
- Two DS programming questions, first one was on trees and second one was on linked list (I have to write down the whole code including main function on paper).
- Finally he asked me that if i have any question for him about the work or company. I said that, i know about the work from the ppt and have already heard about the company a lot from HR in that last 20 minutes of my HR interview. :-p

Company Name: TeraData

Written Test: C aptitude(output based question), General Aptitude(train speed,probability,....) 1-2 question for oops concept. Total 20 question 45 minute. Normal level of question.

No coding Round

Interview:

• Round1:

- Asked about my interested subjects. Asked until I mentioned database into my interesting subjects.
- About M.Tech or B.Tech project.
- A program-you are given an integer, check whether the kth bit is 0 or 1. And after checking it revert that particular bit. I revert this bit using xor operator. Then he asked me to revert this bit without using the xor operator.
- You are given a database of some employee in an organisation. For example, employee id designation and their name. You have to design a data structure to store all the database, such that it can add any query, search and data, update that data, can display all the record of the database when required. Question was which data structure you would prefer. Choose your data structure carefully because he may ask you to implement it(write the code for it).

Round 2:

- Write a program to find the sum of fibonacci series.(provide best solution in first time)
- Database Related simple question 1-2.

- In C++ what kind of database you have used and what is the time complexity for that database.
- 1 question from resume about M.Tech subject.

• Round 3(HR Round):

- Asked about presentation. What did you like in the ppt and dislike.
- Asked about your future aim.
- o Concentrated on whether you can stay in the company for at least 3 years or not.
- And if you say yes then why.

Company Name: Riverbed Technology

Interview:

• Round 1 :

- Ask about your area of interest. All the subjects you know.
- 1 question from resume about M.Tech subject.
- Then asked me to write all the system call I know. I could write only two(open,read....) then forgot then he start to give me some hint by asking What is fork(). Then I tell him some more system call fork, exec, execv, send, receive etc.
- What is process and what is difference between program and process.
- U area, proc structure, and kernel stack.
- o How system calls are handled.
- Resource synchronization and alarm signal.
- If we make a function call in C and apply return statement in that function then how the program return to the calling function from the called function. How does it know that it has to return to that function.
- If we define a char array in called function str[50] and return its base address in the calling function the is it valid or not.
- Scope and storage location of Global variable ,static variable. Where are they stored in the memory(Data segment).
- Some networking concept. What are the names of layers in networking, In which layer computer to computer network works, What is the difference between switch hub and Router.
- What is ip addressing, NAT(network address translation).
- What are the types of transport layer(TCP,UDP) and where are they used.
 Example where we can use tcp and udp protocol.
- How do you debug the given program(gdb).

Round 2:

- About M.Tech project.
- C++ concept, About overloading and overriding.

- Virtual pointer and some gues on that base.
- Abstract class, can we create the object of abstract class and why, pure virtual function.
- Types of inheritance and related input output question.
- Find LCA in Binary search tree and then in Binary tree.(Behave like you don't know about that program before. And act like you are doing this program on the spot :P).
- Best data structure to insert, delete, search any data.
- Hashing concept.
- Static variable and its scope.
- Networking concept, DHCP, ARP, RARP.
- Connection establishment phase in TCP. Syn flag FIN flag etc....
- What is domain name and how a client got to know the ip address of dns server.

• Round 3: HR Round

- Nothing special, asked about behaviour of the person in the pannel, About company.
- Then a brief introduction about the company.

Round 4:

- Optimization of the program asked in the coding round.
- o Find maximum contiguous sum in the given array of integer.
- Socket programming concept.
- How do we find IP of all the router in the given path.

Company Name : Qualcomm

• Round 1:

- One subject from Resume.
- System call concept, process and thread, synchronization mechanism between threads.
- Bitwise allocation of integer in C, 2 program related to bitwise operator, what do you mean by 32-bit or 64-bit processor.
- Difference between c and c++ with their explanation.

• Round 2 :

- String anagram question 2 program.
- Find out link list contains a loop or not.
- B.Tech project.
- Some C language concept.
- Volatile variable, static variable.