

HR Interview Questions (by Aatish Rathi)

One general advice- Prepare very well on your BTP Topic- In almost all the interviews(technical interviews) this was asked to me and my other friends also to explain your BTP. It can really create a very nice first impression. Your explanation should be in simple words and it should also sound very interesting. Don't say so many technical and mathematical things to explain that. Rather give some practical applications (if possible) of your BTP.

1. Some obvious HR questions first:-

- a) why should we hire you? (Answer should be according to company and its profile)
- b) why do you want to join this company? (again answer should be according to above logic)
- c) Your strengths and weaknesses and why do you consider this as ur strength and weakness? (dnt say that weakness which can make ur chances of selection also weak ;))
- d) what you would like to become in life? (at ZS Associate, Yahoo , IOCL) - NEVER ever tell them that you want to do some start-up or anything like that even after 15 or 20 years (even if you want to).... jst control your honesty a lil bit in these circumstances :)
- e) Where do you see yourself 2 years after in dis company and den after 5 years? (asked to me at Oracle and Yahoo)
- f) Describe yourself (or say something about yourself till the time I go through your CV)- this is the most common and obvious question in almost each of the interview. So prepare it well.
- g) Your Hobbies (and they can go deep in that like if you have said Cricket then who was the man of the match in the last match india played and how much run he has scored in dat match? i m giving jst an example... so answer this question very honestly.) - dis MOM qs was asked at IOCL.
- h) Why are you not going for higher studies or CAT? and what is your GRE score and all? - never ever tell them that you have given GRE or CAT....
- i) What if you take a wrong decision? (Oracle)

Filled By Karthik - IOCL

- 1. Why charminar was built ? similarly why golconda fort?
- 2. From Hyderabad to Guwahati..how many Bridges u Have to Cross & their Names?
- 3. Terms in Databases like RDBMS & DBMS and their differences?
- 4. Java , JSP Netbeans, CORBA...just have to know what these are and their purposes?
- 5. Why Lesser CPI? Have to give honest reason?
- 6. Internship specially if done in other PSU's? tell dem in detail!
- 7. Pointers , Arrays, Hash Tables basic significance and small code related to them.?
- 8. Difference between NULL pointer & VOID pointer?
- 9. What's happening in parliament these days? What's the ISSUE going on?

10. Difference in architecture of Windows Vista & Windows 7?

To use the words carefully ... don't be arbitrary , just be bounded regarding the Academics terms. Asks general knowledge about your hometown.

Amazon

Whatever code you write must be flawless, check for loop limits.---- OPP.

1. What is your favourite data structure? I answered Linked List. Then he asked me this one. Every decimal number is represented by a linked list, for e.g. 5243 is represented as four nodes 5->2->4->3, with a value 5 in the first node, 2 in the second node and so on. Given two numbers as two lists l1 and l2 e.g. 5243 and 299, find the difference l1-l2 as a new linked list. Assume l1>=l2. Do not modify the original lists.

2. This is a fav question for many. I was asked this twice in Amazon and once in Directi, with slight modifications each time. Simpler version: Given an array, find the indices of the sub-array which has the maximum sum of elements, Advanced version: Given a 2-D matrix, find the indices of the submatrix which gives the maximum sum of elements. Optimize on time and space.

3. given a function void reverse(int *A, int start, int end), which reverse the part of array A stored in between start and end including the ends, use it to right rotate a array of size N by K time. Ex after right rotating the array 2 4 7 5 8 by two time it will be 5 8 2 4 7.

hint: 3 call to reverse will do :)

[** checking of boundary conditions is very very imp.....

questions on greedy algorithms, dynamic programming.

iterative versions of recursive solutions

parser, automata, distributed systems replication, communication between different nodes in distributed systems etc.] ----- Komal

Directi (by Durga Prasad)

Concentrates on mathematical analysis and theoretical problem solving capability, coding not so important as say, Google or Microsoft or Amazon. As per their website, they want "super intelligent people". Durga Prasad can describe in detail.----OPP

1. Given this preorder traversal 1,2,3,4,5,6,7,8, is there a unique binary tree for this ? How many such trees are possible ? Now given both preorder and postorder traversal, does this lead to a unique binary tree ?

2. Given an array, find all subarrays whose sum of elements is zero. Optimize on time and space complexity.

3. Given an Array of length N containing elements 1--N . Find frequency of each element??

They wanted a linear time algo

Round:1

1. Given a preorder and inorder traversal of a tree give the postorder traversal.

2. A graph of cities with edges indicating a road route or flight route is given with time taken. Find the shortest path from a source to destination using only one flight. (assume flight usage is compulsory).

Few CV related questions. Few details in CV were pointed stressed like I wrote for a project that we tried major network level attacks. They asked me to tell about the network level attacks.

Round :2

Technical round majorly

Asked my preferences.

Few OS questions like Process, segmentation, threading, page replacement (depth was not a concern) just basic knowledge

Network Questions like OSI layer, what is IP, socket etc, IPv4 types like A, B, C, different steps involved when we browse a page in Internet.

Data structures : Hashing different types, B trees, B+ etc (just basic questions)

Why do we use B+ trees for indexing in databases rather than hash?

Given a stock market of a share find the maximum profit a user can make with some different constraints. Write the code (on paper no syntax).

Round :3

1. Given an array in which i th element tells you how many maximum positions you can move from i . (like $a=[3,6,0,5,2,7]$ so we start at $a[0]=3$ and can move either 1 or 2 or 3). Write code to find the min steps required to reach the last element in the array.

2. Given an array - sorted ascending which tells you point index in a line. ex $a=[1,5,10,15,30]$ and k -number of stops. k stops mean $k+1$ distances say if $k=2$ and we stop at 10 and 15 then the distances are 9, 5, 15. Find the min (max of these distances).

i.e. objective is to stop at k locations so that we end up with the a case for which the max of distances is minimum.

My thoughts:

The programming test was almost a joke most of us weren't able to solve it. So just stay till the end and explain your method.

Round1: is the most important if you ace the questions you are selected.

Round2: least important just make sure you answer most of the basic questions.

Round3: Usually a CEO phone interview but due to time constraint MnC folks are interviewed by the people there. But CS guys were interviewed by CEO. This is also important but your problem solving skills are important than the actual solution (I did not solve the second one in interview so CEO asked me mail the solution which I did after 1 hr by which time I was selected).

Major skill they seek is problem solving skills, data structures they emphasised coding too like every idea you suggest has to be supported by what you would use while coding. But the exact code was not stressed.

- 1) Print postorder of a tree from inorder and preorder without building a tree.
- 2) Given a list of +ve and -ve integers. Find out all substrings whose sum is zero(in best time).
- 3) Given a list of cities where city is connected by either a road, flight or both. Find the least cost b/w any two cities with the path having only one flight connection(best time).
- 4) 1.5 hrs of brainstorming

What is DHCP, ARP, HTTP, HTML, IP, IPv6, BCNF, 3NF, Processes, Thread, Semaphore, B+ trees, B trees and others.

Make a schema given the attributes.

Oracle ServerTech

Usually easy. You can easily lead the interviewer to ask what you want. The only code I was required to write was to print inorder traversal of a binary tree (simple, recursive one). Study OS well, and if you don't know Networks or Databases, just tell them that and they won't ask. But OS is a must for both Oracle ST and Oracle SUN.

1. There is a circular table with n people seated. They order lunch and no one gets the correct food he/she ordered. Your task is to prove that if you rotate the table to any orientation you want, at some point, at least two people will have the right food they ordered. Do not use pen or paper.

2. CAT->COT->DOT->DOG... By changing one character in the previous word, you can make a new word. A word is valid only if it exists in a dictionary. Assume you are provided with the dictionary. Propose an efficient data structure for generating valid words starting from any word.

3. There are 10,000 people with names, addresses and other data. What data structure will you use to store their data ? What is the time complexity ?

4. What are ACID properties? Differentiate between C and D. I forgot what A meant.

5. What is the difference between a process and a thread?

6. What is normalization? Why is it useful? Why don't we use it in some cases?

7. There is a row and column sorted (both) matrix. How do you find the kth largest element?

Write the proper code for it-

8. You are given two numbers in matrix forms. They may be of different length. Find the sum of these two numbers (in array form). How do you go about it if no extra memory is to be used?

9. What are indexes? What are the different types of indexes? How are they stored?

10. Suppose you are given a table having student names and their gender. How to find all male student names? (obviously through indexing, but how to store the indexes?)

11. Given a large file containing data(User, Salary) how will you find the user with minimum salary?? They wanted external mergesort here.

Suggestion for Oracle ST: They first asked what my interest was?? You can turn the interview here - they want OS or Database mostly.

Google

Usually asks just algorithms and data structures and no hi-fi data structures are used. The most that is used are: arrays, linked lists, heaps, binary search tree hashing, stack and queue. NO AVL tree, no red black tree. Leave the Fibonacci heap etc. completely. Hardly asks anything from your CV. You must be able to code anything you tell - the code should be more strict than pseudo-code but need not be accurate to being compilable. One interview is on designing a system for a very specific problem.

1. Given $2n+3$ points, no 3 are collinear, no 4 are co-circular, find a circle passing through three points such that n points are inside the circle, and n are outside the circle.

Ans: take the two lowermost points, say A and B, and find the angle subtended by AB at each point. Find the median of these angles. The point corresponding to this value will be the third point.

2. Given 2 very long sorted arrays, find their intersection.
- what if one of them is significantly shorter than the other.

Ans: two pointers and keep incrementing the smaller one.
-binary search the values of smaller in the larger.

3. Median of streaming input

Ans: two heaps: one max and one min. half elements in max and half in min.
 $\max(\max \text{ heap}) < \min(\min \text{ heap})$
if input is smaller than $\max(\max \text{ heap})$, insert in max heap.
if input is larger than $\min(\min \text{ heap})$, insert in min heap.
else insert in either.
if two consecutive inputs go to same heap, say max heap, del $\max(\max \text{ heap})$ and insert in the other. the median will be one of the two: $\max(\max \text{ heap})$ or $\min(\min \text{ heap})$
each step is $O(\log n)$.

4. Given a set of characters and a streaming input from those characters, find a window in which all the characters of the set are present. The window should be as small as possible.

5. There is an infinite railway track with 2 identical flags present somewhere. Two robots are placed on the rail running the same code. Make them meet. The possible instructions the bots can execute are "move left", "move right", if $(\text{flag_present}())$ then {...} else {...}

6. Design a system for the providing the 'cached resource' within a given time. Google

downloads all the pages it comes across to its servers. When you search for a query, it provides a link to the page as it was when google visited it. You have to design a system which will locate the page given its URL. How much machines will you use, what will be their RAMs, hard-disk space, processor's clock speed etc. You can ask for any data that you need, eg. total number of pages, their total size etc.

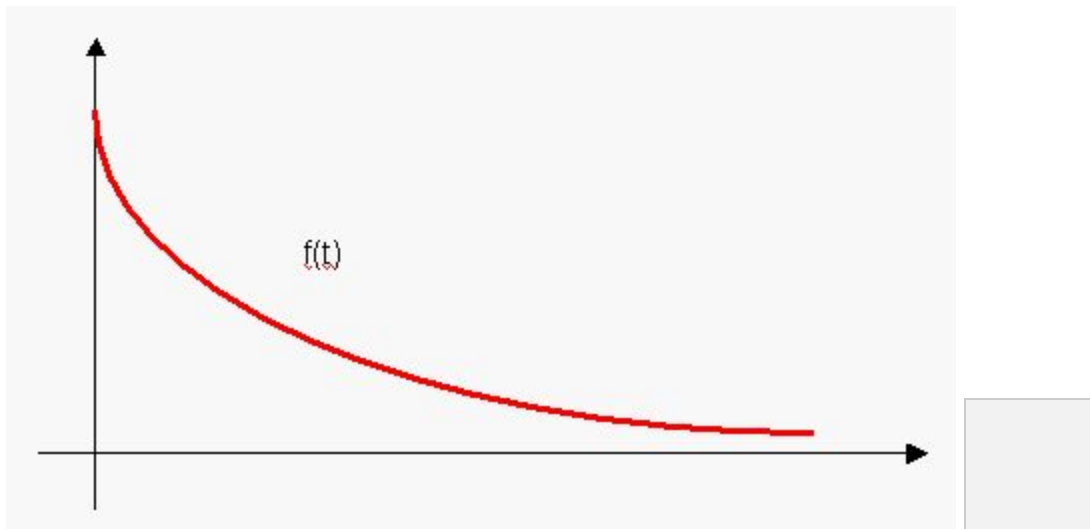
-The question boiled down to indexing these pages and distributing them on various machines.

7. Another design problem: design twitter. People can tweet short messages and people can opt to follow someone's tweets. You have to show 25 most recent tweets. Take care of people following many people and celebs having many followers.

8. Design Problem : There are n sensors, distributed in space, with a central server. Each sensor i senses a value X_i and reports it to the server. The server does summation of all X_i and if this crosses a threshold, rings an alarm. Now the communication is costly process; the sensors consume power for transmitting messages; so more messages means reduced battery life. (Wireless Sensor Network - Classic Problem)

(1) Can we design a model such that communications can be reduced and yet we get an accurate alarm system

(2) Assuming that the sensors follow the following distribution such that the probability of spikes is small. Then can u design a communication model so that the accuracy is still somewhat maintained and further optimization is achieved. - Jatin



9. Create a doubly linked list out of a binary tree such that the order of the linklist is inorder. The linklist should be in place, not a separate node list.

10. 25 horses- you can run 5 horses at a time- and from one race you can only get the top 3 horses information and not their timings and all. In how many races you can find out the top 3

horses among 25?

11. you have a struct "appointment" having three values- start time, finish time and the status which will contain "conflict" or "not conflict". Given n such appointments, what algorithm and data structure you would use to find out all the conflicting state? conflicting state means if any appointment is conflicting with atleast any one of the other n-1, then its conflicting.

12. S is an array of integers with repetition, W an integer denotes size of window. Write a code which finds a permutation of S such that any window of size W in the permutation contains distinct numbers only. Also find the conditions where this is not possible.

13) A given square (black and white) region is specified by a quad-tree(each node with 0 or 4 children) such that each leaf node specifies the colour of the region it represent. Eg.



Each children of a node represent division of the region represented by the node into 4 equal squares.

```
struct node{
    struct node *c1,*c2,*c3,*c4;
    int color;
}
```

- a) How will you find the area of the black coloured region of the square given the area of the root node and the region represented as tree..
 - b) How will you find the intersection of the black regions of two such areas given as two trees.
- [Algorithm and Code]

Ans: Do a BFS type traversal of the tree and perform appropriate actions. optimal time $O(n)$

14) Given a set of random integers, Find the longest possible AP(arithmetic progression) from the given numbers.

15) Given two sorted arrays. Find the median of the merged array.

Hewlett-Packard - Ajeet

The written was very divided into 7 parts. Questions were fairly easy except for the OS and network part in which all fact based questions were asked. in the end, you have to write an grammatically correct e-mail, in 7 mins time.

The HP written stresses upon all the major areas of Computer Science - Algorithms and data structures, C, Networks and OS. I don't remember any on databases.

There were three rounds of interviews.

First was tehcnical. The first question was obviously - "well ajeet, tell me something about yourself".

Then he asked to choose any one subject. I chose algorithms. The questions were -

a) Given a doubly linked list, how you can sort it.

b) What is binary tree and binary search tree. Then he gave me a stream of input and asked to create a BST out of it.

c) Then he came to OS. Concepts of memory management such as virtual memory, swapping, thrashing, paging, supplementary page table etc.

d) Then he came to networks and asked some questions like - 2G and 3G mobile technology, mobile apps-why do we need them, what is the difference between gtalk and gmail in terms of networks, how does internet in mobile works.

e) Then he came to my resume and asked about my projects and internship.

f) This was the funniest part. Internet was not working in his laptop with the configs given by the placement cell. He asked me if I knew the campus LAN structure. After confirmation, he said that his net is not working, can I make it work..and it is the part of the interview. Am I ready to take the challenge. I obviously said yes. He said your interview is over except this, and now you can take your time and help of anyone over here and make the net work.

It was really fun. After 15-20 mins, I gave him google.co.in in his browser.

The second round was intended to be technical but turned out to be more like HR. He asked me a puzzle -

There are 100 doors numbered 1 to 100. All are initially open. There are 100 guys numbered 1

to 100. the 1st guy goes and flips all the doors which are multiples of 1. Then 2nd one flips all the multiples of 2 and so on. What will the status of the doors after all have taken their turn. He asked me to identify the pattern and then write a C code for it.

After that, there were general HR questions like - what's your goal in life, where do you see yourself after 10 years, who is your ideal person in life, why HP, what are the chances that you will be joining us, is it ok for you at banglore and so on.

The third round was pure HR. He asked me some questions on the extra curriculars, what do I think about the theatre and the dramas, what is my long term and short term goal and then explained details about HP and ctc etc.

Yahoo Aatish-

1. given a loop in a linked list, how will you find it out?
2. how will you find out the intersection point of two linked list of different length. I mean the two linked list are in this Y form.
3. tel command in Unix and how would you implement the functionality of tel command? what data structure and all? (ans- circular queue)
4. which debugger you use for ur programs? what debugger actually does? explain the functionality of a debugger which will have a capability of catching a already running program.
5. get and post difference (related to forms u make in html)
6. to find out the 2nd highest element in an array at any instant, what data structure you would use?
7. in a chessboard, a knight is there at the first square. He want to reach to the last square(64th one). and before doing so he wants to reach each and every other squares of chessboard also. Is it possible? which algo you would apply to know such answers (ans- depth first search).
8. Given an array of size n- i hv to insert numbers from 1 to n (no number gets repeated). But while doing so i entered two 0s instead of two numbers. Find out the algo to find out that two missing numbers from the array in $O(n)$ time. (Answer- find out the sum of all elements and product of all and compare it with actually what it should be, so 2 equations and 2 unknowns).
9. Difference between Semaphores and monitors?
10. The Programming question(time given was one and hour hour to write the code but apart from one or two, none were able to write infact the simple brute force method code for this one, so please practice well for C coding)- Given a sequence of number like "123456789", you can insert three things between any two number- "+", "x" or a empty string such that the final expression gets evaluated to 2097. Find all such expressions possible . (for this one there were three expressions). Also try to think of some optimized solution to this one and try to use the funda that the input number given will always be in sequence"

Yahoo! by shailendra

1) Again 1.5 hrs of brainstorming.

Questions on intern projects. Puzzles. Find the output of the given code. Again term based questions as in Directi.

Academic projects asked: Pintos(once in Directi, that too very less), Network(MS and Yahoo)

HR:

1) Most Important for HR and non-HR: Tell me something about yourself.

2) Why this company?

3) What is your GRE score (say that you haven't given GRE).

4) Why not higher studies?

5) Never asked me strengths and weaknesses.

6) Two of them asked me: "Do you drink :):)"

ORACLE AD By Aatish:-

1. If suppose pointer would not have been there in C language, then how would you implement the function of pointer in C.

2. There are 3 boxes. one has only apples, other has only bananas and d 3rd one has mixture of that. All fruits in all the boxes are in infinite number. You are given that all the boxes's labels are wrong. You have to correct their labels. in how many chance you can do that? (Ans- 1).

3. given a 5 L and a 3 L container, you want to take out 4 L, how would you do that? (give 2 different methods).

4. write the C code to print out this pattern-

```
* * * * *
* * *
*
* * *
* * * * *
```

5. asked me to write some simple SQL queries . (like left outer join, one simple query using WHERE clause, and one using GROUP BY and HAVING clause).

6. Asked me to design some simple database given this requirements and all.

7. Normalization - all forms (right from 1NF to 5NF definitions). Why you need normalization?

8. Difference between RDBMS and ODBMS? name few ODBMS. Oracle is what? (ans- oracle is RDBMS)

9. Why you people use only MySql in all your projects and not Oracle (this question was asked to me at Yahoo also, so prepare for that question- at yahoo u cn say - one reason could be MySql is open source. At Oracle, you can say that - Actually we think that Oracle is a much

more powerful and efficient RDBMS which is used at large scale business or industrial purposes. And our requirements were very simple, so we thought of using a RDBMS which uses a bit less resources of our lab comps but may not be that powerful.

10. If you have done any intern on e-commerce sector or any automation project (or database related projects) then be ready to give fundae on that for more than 1 hour each project :D . You will be really tested on that part of ur CV which is related to the job's profile (and this is true with almost all the companies, so prepare all your CV projects and interns very well).

11. Foreign Key concepts. what other constraints you can use while designing database (like UNIQUE, NOT NULL, PRIMARY KEY etc). what is the difference between primary key and unique key.

12. What are the cycles of developing a Software? do you follow all or some of them while developing any software. If no then why (you can say that for our simple softwares and also due to time constraints we didnt follow all of them but ya we tried our best to follow some of the important part of the cycle like case study, some UML designing, screenshots and database design finalising and then development (backend coding) and finally testing.)

13. Do you think you have the ability to become a team leader of a business application software at Oracle within 2 years? If yes why and if not then how many more years you want? :)

14. One simple algo based on counting sort and one on external sort. (two very important sorting mechanism apart from heap sort for placement point of view).

Microsoft

1. Microsoft had a written round. I was asked whether I was satisfied with my answers in the written exam. It gives a positive impression if you have thought of answers to the questions you could not attempt in the exam or improvements to the answers you attempted. Other topics in brief that I was asked are as follows.
2. Pattern matching
3. Design an interface and data-structure for the big integer class.
4. Design the T9 dictionary
5. A Computational Geometry question.
6. Design an offline browsing feature for IE.
7. Design an online back-up system.
8. Rest were common questions from here and there.
9. With MS, your approach and your willingness to listen and interact with the interviewer matters more than solving the question correctly.
10. If the interviewer gives you an opportunity to ask a question, do ask a question but don't ask any question just for the sake of it.
11. Never give up. The last interview is generally a stress interview and that is where most people give up. Also don't lose hope if one of your interviews gets screwed. Microsoft's rounds with us were non-elimination except for the group interview round.

--Best, Dua

Microsoft Interview questions

They were considering me for software testing profile so my 2nd - 4th interview were testing related.

1) Given a 2D array containing only zeroes and ones. whenever you find a zero fill that row and column with zeroes. Give an algorithm.

2) A company has designed a non lethal gun for Japanese women (usually short with small hands) because of an increase in the number of mugging incidents on subway. Write test cases to test the gun.

3) A map is represented as graph with cities as nodes and roads as edges of the graph. you are give a code which gives you the cities within a particular range of a city. Write test cases to test this code.

4) Given a code which takes input as two sorted linked lists and merge them to find a single sorted list. write test cases.

5) The interviewer handed me his key+key-chain and asked what are the

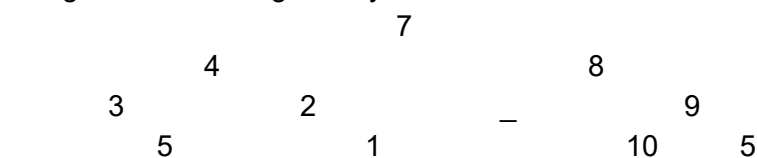
1. Write a function void remove_char(char *st, char ch) which remove all occurrences of the given character ch from the null terminated string st. Ex: After removing character 'a' from string "kfdagaadg" it will be "kfdgdg".

hint: simple $O(n)$ algo is possible. Make sure that your program is handling all the cases.

Also write the test cases to test your program.

2. Write a program which can print the nodes of a binary tree level by level.

Ex. give the following binary tree



output should be

0: 7

1: 4 8

2: 3 2 9

3: 5 1 10 5

hint: order n solution possible.

3. Given to link lists M, N which represents two decimal numbers. Write a function which returns head of a new link list which stores the product of two number stored in M,N. Null list represent nothing where as for zero there will be one node in the list.

hint: $O(mn)$ solution is with $O(m+n)$ extra space can be found simply.

Also write the test cases to test your program.

4. Given 2 sorted arrays write a function which finds the median of the combined array.

Also write the test cases to test your program.

--- make sure to practice writing code

By: shailendra (shailendraagarwal11@gmail.com)

1) Given two sorted arrays. Find the median of the merged array.

2) Code to compress a string. Eg. "aaabbccccc1111222". I said: "a3b2c41-42-3".

3) Implement strcpy().

4) Sort 16 MB of data(integers) in 4 MB memory, without using the disk.

5) Testing of new protocols, that they gave.

6) Code: Addition of node on BST.

7) De-duplicate words in a string.

Facebook

1) Given a linked list in which each element itself can be a linked list. Your task is to flatten the list i.e. one single list.

2) De-duplicate the elements of an integer array.

a) Consider the first occurrence of the repeated element.

b) last occurrence of the repeated element.

3) Problems with fb. What would you like to add to fb? Why join fb?

4) Intern project description.

IBM(IRL):

1) BTP description, few questions (their doubts) about it

2) How to implement 2 queues in an array? Optimize! -- idea is to be **quick** so as to be able to jump to next USEFUL question (they "want" to judge us on research questions, this one was just a time pass) !

3) Intern project description, problem motivation, my role, and its possible application in a different scenario (from Border crossing scenario to traffic lights!!.. analyse properly and then speak, but be QUICK.. those guys seemed to be doing Elimination!)

-- all this in 20 minutes

-Gurmeet

CISCO

The written test of Cisco contained 20 aptitude questions and 30 technical questions [all multiple choice]. The technical ones were on networks mainly, with a few on C/C++, OS and Data Structures.

The interview process consisted of 3 phases for most people : 2 technical rounds and 1 HR round [in my case I had only 1 technical and 1 HR].

{Technical} Round 1 :- {good, kind, gentle interviewer :) :)}
[I rate myself as 7-8/10 in this round]

1. Tell me about yourself ?

Ans. After a lot of Blah ! Blah ! I told him my areas of interest were Algorithms, Networking, DBMS and Web Applications in decreasing manner [increasing order in reality though].

2. OK, so let's begin with Algorithms..... I want to delete all nodes having key 9 from a linked list.... write the algo and compilable code in C or C++.

Ans. Solved it, easy enough.

3. He modified the above question in the foll. ways :-

- a. If it were a doubly LL ?
- b. If it were a circular LL ?
- c. If it were a doubly circular LL ?

Ans. For doubly, more pointers to be modified and in (c), proceed both ways for half time.

4. Asked some question on difference between Data Link Protocol vs {I don't remember} ?

Ans. I thought there were so many data link protocols, that it is not a protocol in itself..... then I pretended to be thinking and after a while said "I'm sorry I don't know". :(

5. Asked what is Multicasting, Broadcasting and Unicasting ?

Ans. Explained in details with examples.

6. He asked on my projects and BTP.

Ans. Explained in details for a long time..... he seemed to be impressed with my BTP work.

{HR} Round 2 :- {Unable to predict type of interviewer :O}

[This is where I rocked. Rating 8-9/10]

Tips :- Keep looking into his eyes after brief pauses. Be confident and speak up and frankly. Do not hesitate and give long answers. Be observant and definitely ask and remember his name. :)

1. Tell me about you ?

Ans. I am from Bhopal, and I have been there all my life. Both of my parents are doctors and they are in govt. service. My elder sister was in Infosys for 1 year but now she's doing MBA in MDI, Gurgaon. My hobbies include gaming and playing football. I have already represented IITG at the Inter-IIT tournaments. As far as academics are concerned.....(I mentioned my areas of interests again)..... (gave brief 2 line description of my 2 main interns).....(brief description of BTP in about 2 lines.)

2. What are your strengths and weaknesses..... ?

Ans. I have had two interns and in both of them I learned a lot. I have worked together as a team and have developed a basic idea of teamwork. As far as weaknesses are concerned, when it comes to publically speaking up I'm a bit shy. :) :)

3. What have you done to improve upon this ?

Ans. I have been working on my communication skills and these placement interviews have helped me a lot.

4. How many interviews have you sat in ?

Ans. This is my third.... [in reality second]. :D

5. Why weren't you selected in the first two ?

Ans. I wasn't able to perform at my level best in the technical rounds. I was a bit nervous and also the competition was tougher then.

6. So the competition's over now ?

Ans. Sir, competition's always there. We are all IITIANS here.... everyone is unique and brilliant..... \m/

7. So, why is your CPI so low ? [6.68 :)]

Ans. Sir, as I said, I went for Inter-IIT in my first year, 3 hours sessions everyday take a lot out of you..... [he didn't seem satisfied] and also frankly speaking I think company matters a lot. My lobby friends told me that co-curricular activities are also very important and they have been involved in some or the other activities just like me..... [no offense intended... I love my lobby-frndz... kuch toh bolna tha :)]

8. Do they have the same CPI as you ?

Ans. [omgf] Yes most of them with a few exceptions [->kholu].

9. Why CISCO ?

Ans. Because it matches my areas of interest i.e. Algorithms and Networking. Also a very close friend of mine, was recruited by CISCO last year... his name is Pranay [Jal or Jal_lab \m/]. I asked him about the company and the working culture and he told me a lot about CISCO.... all positives.

10. What do you know about CISCO ?

Ans. CISCO got its name from the ending of San FranCISCO... although it also has a full-form : Computer Information System Company. I have gone through the company's website and I really liked it.... (he seemed unsatisfied)..... I also went through some CISCO placement papers on web.....

10.1 He got excited and asked "Were they relevant ?"

Ans. I said the written part yes.... but the interview questions did not.....

10.2 He asked me to name the site....

Ans. I spelled out geek4geeks.org :D :D :D

11. Any questions ?

Ans. Sir what is the work culture like ? (courtesy : Raavi)

11.1 He explained a lot... I was hyper... I barely listened..... Then he asked anymore questions ?

Ans. Sir what job profiles are you offering ? [hastily]

11.2 Didn't you attend the ppt ?

Ans. [f*ck] err... Sir I had gone home.... [while thinking abe main toh eligible hi nahi tha ppt mein baithne ke liye 7+ criteria :D]

11.3 OK.... he explained BLAH BLAH... anymore ques ?

Ans. No Sir...

11.4 Thank You Sumit for your time...

Ans. Thank You Sir.... :)

----- Sumit K. Tomer ----- Best of luck guys :) -----

DEShaw (intern)- Deepanshu

Two rounds - one telephonic (mainly technical) and one face2face with a panel of about half a dozen people. (both HR and technical).

Started off with tell me about yourself. Then moved to related stuff - why you did what you did, how did you do it, why this way, how could you do it better. Some basic questions on C/C++ like virtual functions, friend functions etc. their practical usage. Some very simple algo based

questions.

In PintOS, they asked what we had done for defragmentation. By defrag, he meant that if we delete a byte from a file, will the rest of the file have to be shifted, i.e. for a 2gig file, if i delete the first char will i need to move the complete file? I told them nothing so they asked what can be done. I started by telling them how we implemented the file-system and then said that for every block, we store how much free space the block has (don't remember if it was just the last block which had this information or every block; anyways, even if it is just the last block, it can be extended to every block). So, whenever a byte is deleted from the file, we just have to adjust the block in which the byte was. Overnight, we can move all the data again to remove the 'holes'.

Asked if I liked to solve puzzles. I replied that I'm not 'very' eager and don't go hunting for puzzles. But, if someone asks me one, I never ditch. She asked a puzzle. I had heard it before but didn't remember the answer. Was working on it when she asked if I had heard it before. I replied honestly and she moved on.

NetApp:

Round 1:

Mainly Technical round. Few simple questions asked.

First asked about intern and BTP then technical questions

Segmentation. In which segment does a static variable go??

Data structure question: how to find the minimum element of a BST?? write C code.

Round 2:

Again asked about BTP and intern. My BTP was related to real-time systems, so he asked what are real-time systems?? what are embedded systems?? what will be the requirements of for an embedded OS?? Then he went into OS, pintos. What are the main OS constructs, requirements?? Difference between process and thread?? He then asked about ext2 file system - needed to explain all the details-block group, supergroup, inodes, bitmaps etc.... How to find if a linked list has cycles?? Then he asked whether I was going for higher education seeing my CPI- you need to answer clearly NO to this question otherwise no chance of selection. Final question-Do you know what NetApp does??

HR Round:

The HR had a form in which she was filling all the answers to the questions.

Asked full family background. Tell me about yourself. Strength, weakness?? Do you know what Netapp does?? Areas of Interest??

Question asked many times - Will you be going for Higher education???

----Ankit

Fun Anecdotes (No names in this section please)

I'll tell the story in first person even though it wasn't me.

I was being interviewed by some Hi-Fi company. The interviewer asked me an algo question about which I kept on blabbing. He was typing something on his laptop. He asked me if it was a problem; I said no. After I finished, he asked me to code it. I was unable to do so. He turned his laptop and showed me a code. He said, "the code for your algo is here. You can trust my coding skills. If your algorithm is correct, my code is correct." I was like :O...

So, just one piece of advice: **"They are not fools and don't try to take them for a ride"**.