**Cisco Interview Experience for Software Engineering Internship 2020**

* Difficulty Level : [Medium](https://www.geeksforgeeks.org/medium/)
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 Read

 Discuss

This is an off-campus interview Experience.

**Round 1 (online assessment):**In this round, 15 MCQ based on aptitude, CN, DBMS, OS, pseudo code, and 2 programming question.

I was able to solve 1 programming question and 12 correct MCQ. After 5 days I got an interview mail. Total of 154 students shortlisted for the interview process and the interview conduct on the cisco team app.

**Round 2 (45 min):**2 interviewers take the interview at the same time. 1 was a very experienced person and 1 was 2-3 years experience.

1. Tell me about yourself.
2. Tell me about your project and which technology you use in your career and why you use it.
3. How URL work? (Details explanation)
4. How you check the user authentication?

After this, they move onto the DSA part

1. Your given N stairs and you can take only 2 steps. Find how many ways to take the steps. **Answer:** (N-1) this is a simple math question
2. After 4 questions, you’re given N stairs and you can take the exact M step now find the number of ways to take the steps. https://www.techiedelight.com/find-total-ways-reach-nth-stair-with-atmost-m-steps/. **Answerer:** I told him the recursion approach with memorization. And Details discussion on Space and Time complexity. Both interviewers were satisfied.
3. They asked which data structure you used to design the Router connection(like a graph). I told him 3 different methods and the reason behind the method.
4. When you write a code for some program but the problem is which directory you used is depended on other directories and sometimes they make a cycle in a directory and give a compiler error. You need to find the cycle make or not in a directory. [Check if a linked list is Circular Linked List.](https://www.geeksforgeeks.org/check-if-a-linked-list-is-circular-linked-list/)

After this round, 96 students selected for 2nd round.

**Round 2 (45 min) :**

1. Tell me about yourself
2. Detailed discussion on the project.
3. What are the IP model layers and the working of every layer in depths?
4. How the datagram packet converts into the frame and how the computer decides the size of the frame.
5. Difference between UDP and TCP.
6. How exactly data send using TCP or UDP.
7. How sender confirms that the send data will successfully send or not, after this, he moved onto the DSA part.
8. You’re given N and K and you need to set the Kth bit position in N and print it. Write only 1 line code (use shift operator)
9. You’re given 3 numbers N, K, and M. You need to set the Kth bit position in N and read M bit after Kth bit. Write code in 1 line.
10. You have 50 red balls, 50 blue balls, and 2 bags. You want to arrange the balls into these bags in such a manner as to maximize the probability that picking a bag at random and then picking a ball at random results in a red ball. What is the maximum probability?
11. In 1st bag---> Put 1 red ball
12. In 2nd bag---> Put the remaining 50 blue+49 red balls.
13. In this way
14. P(Red ball)= 1/2\*1 + 1/2\*49/99
15. = 0.5 + 0.24747

= 0.74747 or 0.7475 (Ans)

I answer almost all the questions and my interviewer was very satisfied with my all answer.

After this round, only 44 students selected for the HR round, and I was one of them.

**Round 3 (HR round 15 min) :**

1. Tell me about yourself and your family background
2. Tell me about your college and city
3. Tell me about your hobbies?
4. Do you have any other offers?
5. Did you use any Cisco products in your life?
6. Which position you prefer ( 3 positions available in this recruiter process )
7. Will you be able to relocate to any locations in India?
8. Which location do you prefer Bangalore, Chennai, Pune?

Then he informs me about the stipend.

After 15 days, the result was out. Those who’re selected got a Letter of intend mail. But I neither got a Letter of intent mail nor got rejection mail.

This was a great experience for me.

**Tips:**

1. Always have knowledge about the company and the profile you are applying to.
2. During live coding even if your code doesn’t work try explaining your approach that matters more than correct output.
3. Be very clear with basics and confident with your answers the interviewer may try to confuse you.
4. Learn to say No to the questions you have no idea about or don’t know at all.