

# Ciena Interview Experience (C Language)

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## **Online Assessment:**

Duration- (75 mins)

It was taken on the codility platform. It consisted of 6 sections. Section 1 and 2 were logical and aptitude tests. Section 3 was an output question. Section 4 and 5 were debugging questions and section 6th had a coding problem.

## **Interview 1**

Duration - 30 - 35 mins

Interviewer started with introducing himself and went through my resume. He asked about the projects mentioned in my resume and how they were created, why were they created. He asked about the connectivity and working of the projects. He needed a detailed explanation about each project.

Then he started asking technical questions. Questions that were asked are:

- ❖ What is TCP?
- ❖ What are the layers of OSI?
- ❖ How are the systems connected in your lab?
- ❖ What topology is used for connections in the lab?
- ❖ What are queues and stack?
- ❖ What is the internal processing done when a program is compiled in C?
- ❖ What is linking?
- ❖ How a #include file is included in a program?
- ❖ Implement a stack using a linked list.
- ❖ If you have to create a program for a lift system, what will be the data structure used by you? What functions will need to be created? Write pseudocode for each function.
- ❖ How does Google work?
- ❖ What is the internet?
- ❖ Program regarding client and server.

Then he started asking HR questions. That were:

- ❖ Do you know about Ciena?
- ❖ Who is your inspiration?
- ❖ Who is your idol?
- ❖ What is your goal in life?
- ❖ He also asked some questions related to my hobbies.

## **Interview 2**

Duration - 30 - 45 mins

Interviewer introduced himself and started the interview by asking about classes in C. He then asked about the types of constructor and asked me to write codes for each constructor. He asked me to create an object of the class and asked about the internal working of that code.

Then he asked about abstract classes and what special property must be followed by the inherited class of an abstract class. He also asked to write a code to demonstrate the property. He also asked about virtual classes.

Then he asked if there is a class A, it has two child classes B and C and B and C have a common child class D, then whenever an object of D is created, an ambiguous object of A is created. How to remove this ambiguity?

Next question asked was about 2d arrays. What are 2d arrays and memory representation of a 2d array. He asked me to write a function to create a 2d array. He further questioned me about the return type `int**` of the function I created. Why the return type was `int**`. He also asked about the difference between `arr[0]` and `arr`. In data structure, he asked me to give a program to give the merging point of two linked lists.

Then he moved onto OS questions. He wanted to know about the difference between semaphore and mutex and the difference between process and thread.

### **Points to be noted:**

1. Do not get nervous. Answer all the questions with confidence. If you do not know the answer don't waste time, just say it directly.
2. Prepare Operating system and Computer Networkings properly, major questions are asked from this section.
3. If you get stuck, do not fret, the interviewer gives hints to help you out.