

## How did you prepared?

**Data Structures:** Trees, Linked List, Stack and Queue etc

**OOPS:** Inheritance, Polymorphism, Data Abstraction, etc

**Java:** Collection and Streams

**C Programming Concepts:** Pointers, Structures, dynamic memory allocation, storage classes, etc

**Database Management System (DBMS):** Joins, Normalization and Transactions (ACID Properties)

## Duration Of Preparation

2 months

## Preparation Tips

- **Tip 1 :** Make your basics strong don't run after new technologies as a fresher companies wants your good command on DSA
- **Tip 2:** Focus more on competitive programming to get into a good organization don't indulge to much in development because the first step to reach to the interview round is to clear the coding round
- **Tip 3:** Do atleast 2-3 Questions per day and practice daily leetcode challenge
- **Tip 4:** Also practice basic aptitude questions

## How did I applied?

### Where did I applied?

On Campus

### Any eligibility criteria?

BE/B.TECH – CS/IT

7/10 CGPA and above, No Active Backlogs in any semester

### Resume Tips

**Tip 1:** Don't mention things in the resume that you don't have full command on you should have complete knowledge of what you mention in your resume

**Tip 2:** Make your resume short and if you mention projects in your resume be clear about the details of the project even if you have done that in group because the interviewer will surely ask from it.

### Why I was shortlisted?

I gave the approach of every coding question asked to me in  $O(n)$  complexity. I gave my interview with a free and relaxed mind state considering it as a discussion rather than the interview. I was interactive with the interviewer even if I think my approach is wrong as it is must in online interviews. I explained the approach and concepts in an easily understandable way. I tried to keep my fluency good in front of the interviewers.

## Number Of Rounds

4

## First Round Details

### Round Type

Online – Cognitive Abilities  
(Cognify)

### Location Of Round

From your home

### Difficulty Of Round

Medium

### Date Of Round

01-04-2021

### Platform

<https://prepinsta.com/ibm/cognitive-ability-games/>

### Duration Of Round(in minutes)

60 minutes

## Description Of Round

Many of the students had already attempted the cognify round at the time when IBM came to hire interns for 6 months in April 2021. The test was held on 01 Apr 2021. At the time of placement, the cognify round was held only for the ones who have not attempted it before, for the remaining students the initially attempted first round (cognify round) was considered.

Students have to first join the meeting link provided by the company and have to remain in the meeting till the test is not completed i.e. for complete 1 hour with both the camera and microphone ON.

The test was a gaming assessment where they test your knowledge by playing games based on numerical reasoning, verbal knowledge, and problem solving as described in the provided link above.

### Why were you passed/rejected for this round?

I passed in this round because my numerical reasoning and verbal knowledge section went good. In problem solving I have completed only a few puzzles.

## Second Round Details

### Round Type

Coding

### Date Of Round

03-09-2021

### Difficulty Of Round

Medium

### Duration Of Round

40 minutes

## Description Of Round

The test started at 7 pm with 15 minutes buffer time to login. I started my test exactly at 7 pm and it went till 7:40 pm. The test was held at Hackerrank platform with camera ON for the complete duration.

### The test included

**A coding question** where you have to print a pattern of medium difficulty level, and

**An SQL query** question with complete data provided where you have to write the query to print the desired output.

To become eligible for the next round, you have to complete atleast one question.

**Note\*** - Be careful of plagiarism as many of the students failed to clear the round even if they have completed both the questions.

### Why I cleared this round?

I was able to clear this round as I completed my coding question successfully with all the test cases running.

## Problems Data

### Problem 1

#### Problem Type

Coding + MySQL

#### Problem Statement

There was some description of the following pattern

```

    *
  . . . . .
 . . . * * * . . .
 . . * * * * * . .
 . * * * * * .
 . * * * * * .
 * * * * *
 . * * * * * .
 . . * * * * * .
 . . . * * * . . .
    *
  . . . . .

```

#### Explanation of the approach I used

**Step 1:** I divided the pattern in two halves and looked forward to print half of it first using loops.

**Step 2:** Then I printed the all stars (\*) row that is the mid row.

**Step 3:** Finally I followed the same logic for the lower half as I did for the upper half with some modifications.

### Problem 2

#### Problem Type

MySQL query

**Problem Statement**

I do not remember the exact data and the question but the query was not too difficult.  
We have to retrieve data from a single table. No joins were used.

**Explanation of the approach I used**

Look forward to the data carefully and the output to be printed then only start writing the query. Take some time to understand the question first as the data and the question could be a little confusing. Overall the query was easy to execute.

**Third Round Details**

Round Type	Date Of Round(approx.)
Coding + MySQL	05-09-2021
Difficulty Of Round	Duration Of Round(in minutes)
Medium	70 minutes

**Description Of Round**

The third round was also held on Hackerrank platform at 11:00 am.

Prior to starting the exam students have to attend the meet for Pre-Placement talk (10:00 am – 10:55 am).

At 11:00 am students had to join another meeting link provided by the company on CISCO WebEx and had to remain in the meet till the exam finished.

**The test consists of 4 questions –**

**2 Coding based** (A Pattern Programming and A simple coding question that should be done by performing some simple mathematics with arrays)

**2 MySQL** query based

The data of the questions both coding and MySQL was derived from the recent Olympics.

To be eligible for the interview round, one has to complete atleast two questions from any section.

**Why I cleared this round?**

I cleared this round because I completed both the coding questions successfully with all test cases running with minimum time complexity.

**Problems Data****Problem 1****Problem Type**

## Problem Statement

Overall the question was easy and not at all much time consuming.

I used the in built methods of Collections in java like Collections.max(), Collections.sort(), etc.

### Coding Problem (Pattern Programming)

Tip 5 – Copy and pasted the code for upper  $n/2$  rows for printing the same next lower half of the pattern and finally displayed the last row following the same logic as I used for first with a fewer modifications.

## Fourth Round Details

### Round Type

Video Interview

### Date Of Round(approx.)

08-09-2021

### Difficulty Of Round

Medium

### Duration Of Round(in minutes)

45 minutes

## Description Of Round

My interview was scheduled on 08 Sept 2021 at 02:00 pm – 02:45 pm on Cisco WebEx platform.

There were two interviewers who started by introducing themselves and then asked me to give a brief introduction of mine.

I mentioned my educational background, most recent employment I had (6 months internship), project I was working upon during my internship duration and finally concluded by telling my personal interests.

Next they asked me about my internship project in detail with the specific domain I am working in, my approach, about the team work, etc. They asked about the OOPs concept I used while working on the project, In answer to which I explained the use of inheritance, polymorphism and data abstraction in the project.

I was then asked if I wanted to try solving the SQL query asked in coding round 2 (which I had not attempted completely). I told them the approach that satisfied  $\frac{3}{4}$  conditions but I got stuck at the last condition mentioned, I tried hard but it didn't strike in my mind at that time. Still I gave them a few hints about the same.

Some situational questions were also asked like what would I do if one of my teammate refuse to work allotted to him/her and give lame excuses.

I answered , I would first try to convince him/her, later if still he/she would not agree then I with my other team-mate would allot her the work he/she wants to do or is interested in and we will divide her work among ourselves. I concluded that I would try my level best to solve this issue on our end itself.

The other interviewer then switched to my resume and I was interviewed about my certifications, courses I had done, command on the technical skills mentioned in the resume and about other work experiences I mentioned. This went on for almost 35-40 minutes.

Next they asked me some general **HR questions** like

**What was the biggest failure in my life?**

**How I overcame through it?**

**What was my biggest achievement till now?**

Finally they asked if I have any question to ask them?

I replied yes, and asked about the working environment at IBM.

They answered it really well and that's how I finished my interview with a statement "See you soon".

### **Why I got selected?**

I finally got selected because I remained confident and fluent with my answers and I prepared my resume and projects pretty well.

## **Verdict – Selected @IBM**

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