



## INTERVIEW EXPERIENCE 2022

### SOFTWARE ENGINEER 1

Hello, this is **Hariom Rajput**, I am an MCA CSE student at the National Institute of Technology, Warangal batch 2020-23. I interviewed for an SDE-1 role at MAQ Software.

The recruitment process included 4 rounds in total as follows:

**Round 1:** Online Test

**Round 2:** Technical Interview

**Round 3:** Technical Interview

**Round 4:** Technical + HR interview

Eligibility Criteria: **6+ CGPA** and 60%+ in 10<sup>th</sup> and 12<sup>th</sup>, No active backlogs

#### Round 1: (Coding Round)

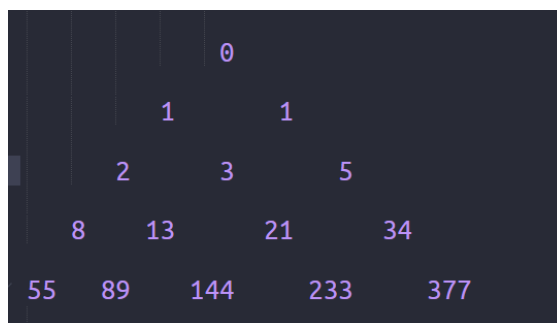
- Their test was conducted on a special platform which we have to install on our pc before giving the test.
- There was only one section which comprised 4 coding questions all based on dynamic programming.
- All are of string and array.
- But some restrictions were there given below-
- you can't modify the function signature. Also, you can't write anything out of the given function.
- You can't use Standard Template Library.
- There was space for writing the code, in that space, you can write only.

```
1 int solve (int num ) {  
2  
3     // here you can write your code  
4  
5  
6  
7  
8     throw solveNotFound(Exeption e);  
9 }
```

- **For example**, You can write only from line 4 to line 7.
- I don't know the exact question.

## Round 2: (Technical Round)

- A very cool guy came to interview me and asked me to introduce myself. After that, he started with OOPs concepts.
- What is polymorphism, encapsulation, and inheritance, what is the destructor, why destructor is important, and what is a memory leak?
- How many types of storage classes are there, and explain them.
- After that, he jumped on DBMS and asked some questions on ACID property, Normalization, property of all normal forms, and different types of keys, what is a deadlock in DBMS.
- After that, he told me to write 4-5 SQL queries related to JOIN, subquery and union.
- After that, he told me to create a program that will give the output like this-



- This means the Fibonacci series is in pyramid form.
- After that, he gives me another coding question, in which he gave me a string and told me to print the last character of each word.
- After that he asked me, can you write a code create a BST and perform all the operations on it? I said yes.
- it was of 45 minutes approx, I gave all the answers according to my ability and I was selected R2.

## Round 3: (Technical Round)

- Here the interviewer was quite strict. Neither did he take my introduction nor did he see my resume. He just came and opened his editor.
- He gave a code snippet of JAVA and asked what will the output of this code.
- Code was based on the **property the reference variable of the Parent class is capable to hold its object reference as well as its child object reference.**  
Why this output is coming? Why this is happening?
- After that, he gave me one coding question which was again on the string. and he told me to write a code that subtracts two numbers without using arithmetic operators. You can't use any, any, any operators anyhow.
- I spent 15 minutes on this, but I could not code it. But I told him the idea and the Idea was we have to use a bitwise operator.

- This round was of 35-40 minutes, I think. And after this round, I was a little worried about whether I would get selected or not for the next round.

## Round 4: (Technical Round + HR)

- He asked me to introduce myself.
- Then he gave me a GFG Puzzle 18 | (Torch and Bridge).  
I solved it and then he asked me the idea behind the approach.
- After that he said, tell me something which is not mentioned in your resume.
- Tell me about your family. where do you see yourself in the future?
- After that, he told me to write a program for the Fibonacci series.
- Then, Print the Fibonacci, where the number contains more than two digits would we reverse the original number.
- Then, if the number contains more than two digits, if it is palindrome then add 1 to that number and then reverse it and then print the series. Else print the number as it is.
- After that, he came on to the DBMS and asked 8-10 queries related to JOIN, UNION, subquery, and basic SELECT operations.
- As I mentioned JAVA in my resume, so he asked some questions like Final, Finally, Finalize, static keyword, and static block. When finalize method will invoke? What things JVM automatically creates in a JAVA class, if we are not creating explicitly?
- And after 15-20 minutes finally, HR will told me you are selected.

## My POV:

- First and **VVIMP** tries to maintain your CGPA, try to keep it **above 7** if not then at least above 6.5. Otherwise, you will be deprived of many opportunities.
- Practice coding questions from **GFG** and **Leetcode**. Practice all standard questions from **Striver's SDE sheet** and **450 DSA sheet**. it will cover all the patterns. it would be enough. You can do more if you want.
- Practice behavioral questions, don't take them lightly.
- Always be polite to your interviewer.
- Do all **basics** of C language. It is very important.

Special thanks to **Amrit Pandey (MCA Placement Representative)** for his hard work and efforts.

At last, I would say that apart from all this your selection will depend on your interviewer and on your luck. And never give up, **"Jo bhi Hoga, Achha Hoga"**.

**Wishing you All the best!!!**