PLACEMENT
INSIGHTS

(COMPILED BY CHEMINEERS SOCIETY)

CREDITS

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SENIORS

Thanks to all the seniors who shared their placement insights and made this possible. Your guidance has been invaluable and will be a great help to all the junior batches.

auxoai

AUXOAI
PROFILE : DATA SCIENCE
(BY ABHAY SISODIA)

PREPARATION RESOURCES

Resources are standard and can be found on the internet easily.

Coding :
Leetcode -> Grind it hard
Interview Bit-> Do it after you finished a particular topic

Machine Learning,Deep Learning and Data Mining :
Stanford CS229 (Course, math heavy should be done accordingly)
ML771 (Course)
IME 672 (Course)
Hands On Machine Learning with Python and Tensorflow (Book, recommended, very good one)

Sql (Websites to learn and Code) :
Datalemur Sql
w3schools
sqlbolt

COMPLETE PROCESS

- **Resume Submission**
  - Key Point to note in this is to craft your resume according to the profiles you are applying to and be clear about your selections.
  - No need to run after every profile. My profile was majorly targeted towards Data Science Roles (which also covers Analyst Profile). Make sure to keep an eye towards core related opportunities and to prepare one resume specifically for this.

- **Technical Tests**
  - Take each and every Test seriously, I have seen many of my friends neglect a few tests just because they belong to core, not exactly their domain and later they repent about it. Also prepare yourself well for the test , your friend might help you clear the test but not interview. So, have a sound Knowledge of your domain.

- **Technical Interview**
  - The Last and the ultimate step. Go through the company's proforma, revise key concepts and skills mentioned, and also be sure to cover all the HR questions. Now, after you complete all this make sure to connect to any senior already placed in that company ,it will definitely help you.
  - AuxoAI also had a similar process. Technical test consisted of ML related questions along with medium level coding questions.

INTERVIEW QUESTIONS

- 1st Round was more technical. Resume Based questions related to projects ,PORs etc. were there. It was followed By a Guesstimate and then some More Machine Learning related questions.
- Interviewer was Chill , he was a Y14 Alum.
- 2nd Round was technical+HR . It started with a guesstimate then some mathematical questions (they were pretty hard ,required good visualizations of concepts) ,finally some HR questions.
- Interviewer was not that chill but she was supportive and was specifically interested in the approach rather than the final answer.
- 3rd Round included basic questions about family background and then some HR questions

TIPS/SUGGESTIONS

- Be patient ,if it is meant for you ,you will get it!

INDUS INSIGHTS

PROFILE : CONSULTING/ DATA ANALYST
(BY AYUSH RAJ)

PREPARATION RESOURCES

Aptitude test:
https://www.prepleaf.com/

Guesstimate:
 Guesstimate_kgp.pdf
Prepare with your friends

Cases:
I have prepared cases for product roles earlier. Consulting cases I have done just before the interview day. My friend suggested me to watch video of IITB interview cracked.

This playlist I have followed:
Session #1 - Introduction to Case Interviews
Prepare with your friends

HR round:
Get prepared with the HR questions in advance as they will be asked in almost every company. Prepare a doc of your answers to the HR questions. Believe me you will benefit from this.

COMPLETE PROCESS

- **Aptitude Test**
  - General aptitude questions were asked followed by a guesstimate which we have to type in the test. The question was to estimate the number of paper bags used by Swiggy Instamart in a week in Delhi.
  - Almost all who have filled the form got shortlisted for the aptitude test. There was no resume shortlisting.
- **Technical Interview**
  - Interview shortlist was announced just a day before the interview. Then there was a buddy round(meeting of the shortlisted students with 2 buddies in which they guided us about what the process will be and how we will be judged). The interview consists of **4 rounds.**

INTERVIEW QUESTIONS

- **A) Guesstimate:**
- The question asked to me was to estimate the revenue of FIITJEE centres across Delhi. Basically they have a time constraint, they just want to see the approach(this is for Indus only, may vary depending upon the company), the assumptions you are making and the questions you ask. After guesstimate there were only 20-25 students left.
- Time duration: 15 minutes approx.
- **B)Case Round:** There was a case study based on profitability. An American company whose business is to give equipment at rent. They want to enter in providing loans to small and medium sized businesses. They have data of almost 1 million existing users in their previous business. They thought of telephone marketing. You have to tell whether it is feasible or not.
- After the case round there were 12-15 students left.
- Time duration: 30-35 minutes approx.
- **C) Technical Round:** This was not an elimination round. They just came here for two profiles i.e., Associate and Senior Associate. So if you qualify the Technical round you will be selected to Senior Associate otherwise you will be selected for Associate. They give you two options to select from: SQL and Python. Questions are simple if you have prior experience. Some of the questions which I can remember are:
- Write a program which merges an employee dataset with itself and then sorts by the income
- You have a set of values for incomes of individuals, ranging from $0-$100K. Assume a uniform distribution of 1%ile corresponding to $1K. We want to cap these values at the 95th %ile and floor them at the 5th %ile. How will you do this?
- Consider a function "fun" which is defined below:
- def fun(x):
- x[1] =5
- return x
- Now you define a list which has three numbers in it. g = [10, 11, 12]
- What is the output of the given print statement: "print(fun(g))"

- Write a program to set column col1 as index of dataframe df
- Write a function to take a dataframe as an argument and return another dataframe after dropping columns with <2 unique non-null values.
- We have two datasets:
  1. Player information for the entire sport league (without team name)
  2. Player information for "Team Y"
- Write a code to create a 1/0 flag in dataset 1 to mark players present in "Team Y"
- Time duration: 20 minutes approx
- **D)Behavioural / HR Round:** This was the final and elimination round. They just asked me about everything from my family background to my friend, what I like about them and what I dislike. My journey at IIT Kanpur, my failures, my life like everything they asked me.
- Time duration : 1 hour 15 to 20 minutes.
- One important thing to keep in mind while giving HR rounds is that while you are being yourself don't tell anything which can have a bad impression of you on the interviewer. I had recited a poem written by me to the interviewer and he was impressed. But you can't just go there and recite it. First I had made the plot layer by layer so that he himself will ask me to recite it and guess what it happened and I was prepared for it

TIPS/SUGGESTIONS

- Read about the company, what it is all about and what will be your role in advance.
- Try to align your profile with the job description
- Never say that you are inclined towards higher studies/pursuing MBA in near future
- Be confident.

FINMECHANICS
PROFILE : ASSOCIATE
CONSULTANT
(BY AYUSH ANAND)

PREPARATION RESOURCES

FINANCE:
If you have a finance related project, prepare the hell out of that - you should know what every word on your resume means. In case you don't have a project, go through basics by Zerodha.

TECH:
If you are preparing for Software roles, you'd already be familiar with OOPS - if not, any resource available online works, focus on understanding the different concepts rather than rote learning. For DSA, they asked LC easy - medium questions only. (nothing above DP), so interview bit should be more than enough.

CONSULTING:
In any case, even if you do not have prior experience, have a broad idea of why you want to work in consulting (and why you'd prefer a software and service based company like finmech over management consulting like mbb).

COMPLETE PROCESS

- **Written Assessment + HR form**
  - The HR form had to be filled in 20 minutes and was quite exhaustive.
  - Tip: Assess the importance of questions and answer according to that order. There were no marks mentioned but some questions were more important than others.
  - The assessment consisted of a pen and paper test [MCQs + Integer type] in which the answers had to be marked on an OMR sheet. The test had the following sections:
    (i) Maths [Somewhere between mains and advanced level. Some medium difficult questions on probability distributions.]
    (ii) Java [Need not be proficient in Java to answer. Having a strong hold on any high level language would suffice.]
    (iii) Finance [Literally reading comprehension testing. No prior knowledge of finance was needed.]

- **Interview round 1 [70 -> 9]**
  - There was a panel of 3 interviewers. Mostly associates.

- **Interview round 2 [9 -> 2]**
  - There was a panel of 9-10 interviewers. Directors were also present.

INTERVIEW QUESTIONS

INTERVIEW ROUND 1 QUESTIONS:
- Tell me about yourself
- 1-2 questions on intern/project mentioned in resume
- assessed capability in tech/finance/consulting (ideally any 2) and asked questions based on that asked to prioritize preference order among the following job descriptions:
  1) client interaction & understanding their problems
  2) figuring out how to implement the solution [bridging the gap between 1 & 3]
  3) development of the solution
  4) all of the above [variations of this were asked to different people]

INTERVIEW ROUND 2 QUESTIONS:
- Basic HR: Why Finmechanics? Why not consulting / tech / product/ whatever other shortlist you have (they'll ask).
- Questions based on resume: They can ask about anything and everything mentioned on the resume.
- Random questions like :
- What do you like about Kanpur?
- If you were the director of IITK, what would you change?
- What's a technology/business you know about that most others won't?
- What do you like the most/least about your department?
- Choose b/w mckinsey BA, google SDE & JP morgan quant.

TIPS/SUGGESTIONS

- Prepare as many questions as you can, but do not try to remember cookie-cut responses. It's boring and reductive, and most importantly, you are not going to fool the interviewer. Actually introspect while preparing for HR questions and come up with answers that highlight your strengths while remaining accurate and unique to you.

BLITZ BIGSHORT TAILS PVT.LTD
PROFILE : BUSINESS ANALYST
(BY NIKUND JAIN)

PREPARATION RESOURCES

Leetcode, datalemur for SQL questions.
Kaggle for python
GfG and brainstellar for puzzles.

COMPLETE PROCESS

- **Online Assessment**
  - The online assessment of Blitz contained basic excel, sql, python questions along with the GfG Puzzles

- **Interview rounds**
  - After the online assessment I had 2 rounds of interview. The rounds of interview were different for majority candidates as some of them gave 3-4 rounds of interview for the same role.
  - The average duration of each round was somewhere around 35-45 minutes.

INTERVIEW QUESTIONS

INTERVIEW ROUND 1 QUESTIONS:
- Firsty I was grilled on my resume, especially my internship projects. After covering the resume part, I was asked to do a case study. The case study was about the supply chain of the product.
- After that a few technical questions on SQL and excel were asked.

INTERVIEW ROUND 2 QUESTIONS:
- I was again grilled on my resume and again it was intern specific. After that I was asked 2 GFG puzzles. Later we moved on to advanced SQL, Python and excel questions.

TIPS/SUGGESTIONS

- My suggestion would be to be prepared for any role, in my case I was only preparing for SDE, Data Science roles but the placement process can give you surprises as I wasn't shortlisted in any SDE company and only in Data Science,Analytics and Product Companies as I had a 4th year POR and a fairly decent CPI of 7.5 above.

- I started doing cases and guesstimates a day prior to my interview i.e. on 31st December which should not be done. Be prepared for every scenario.

EXL

PROFILE : CONSULTANT 1 - ANALYTICS & DIGITAL

(BY SAKSHAM ARORA)

PREPARATION RESOURCES

Aptitude test:
Brainly
Guesstimates and Case studies:
Link
Practice with your friends
HR round:
Prepare for HR questions in advance, as they are likely to be asked in almost every company. Create a document with your answers to HR questions; it will be beneficial.

COMPLETE PROCESS

- **Aptitude test**
  - Basic aptitude test questions were asked. Sections were Aptitude, Data interpretation, and English. Data interpretation is often a bit tougher, given the limited time for each section. The test lasted around 60 minutes.
  - I qualified for the interview, which was announced a day before; it depends on the SPO when they want to reveal the shortlists.

- **Technical Interview**
  - EXL's interview format wasn't conventional. I had 2 interview rounds, both by different persons. Both rounds were independent, testing similar concepts. However, the second interview leaned more towards consulting.

INTERVIEW QUESTIONS

INTERVIEW ROUND 1 QUESTIONS:
- Duration: 1 hour
- It started with a brief introduction and questions from my resume.
- SQL questions were asked, checking if my basic concepts were clear.
- Questions on Joins were included, with a scenario of multiple zeroes, asking me to perform joins and predict the output theoretically.
- Clarity about the type of work you want to do and how your resume aligns with it is crucial.
- Personal finance questions were asked, along with a small case related to it. Additionally, a guesstimate question was posed, requiring me to estimate the number of foreign nationals arriving in India (excluding foreign cricketers and their acquaintances) if India organizes the T20 World Cup in 2024. My first round was the longest among all candidates

INTERVIEW ROUND 2 QUESTIONS:
- Duration : 45 minutes
- The second round also focused on the resume, case study, and guesstimates. I was asked to estimate the number of refrigerators sold in India each year (considering all types of refrigerators).
- The interviewer then presented a case study where I had to design a roadmap for analyzing the market requirements of a product launched by a spectacle company like Lenskart. The interviewer seemed more senior than the first.

TIPS/SUGGESTIONS

- I would advise polishing your resume as much as possible. Practice 1-2 case studies with a friend, even if you're targeting another profile, it always helps. You never know what might come your way. Keep a smile on your face and maintain a light conversation. No one would appreciate a dead serious person in the company.
- Read about the company, understanding its nature and your role in advance and be confident.
- Align your profile with the job description.
- Avoid stating an inclination towards higher studies or pursuing an MBA in the near future.

FPL TECHNOLOGIES

PROFILE : DATA SCIENTIST (BY SHRUTI GUPTA)

PREPARATION RESOURCES

Puzzles:
Easy, Medium Puzzles from Brainsteller and Gfg puzzles
https://www.geeksforgeeks.org/top-100-puzzles-asked-in-interviews/ (Most of the puzzles are covered in this)

General ML topics:
https://www.youtube.com/@statquest

HR Questions:
Prepare for commonly asked HR questions (simply google it). In my case, I was switching from a core to a non-core profile, so one question was asked by all the companies: "Why non-core, and why have you done intern in core?". So prepare for that as well.
50 CP: https://www.youtube.com/playlist?list=PL3YfeZZ7Mdjmhucty7I55jX7RwS3OpVAN

COMPLETE PROCESS

- **Aptitude test**
  - Duration : 1 hour
  - Questions : 45 objective
  - All students who applied were shortlisted for the test. There were general aptitude questions, ML and data science questions (spanning topics like Decision trees, Linear/Logistic regression, etc.), questions on probability, graphs(histograms, pie charts), etc...

- **Technical Interview**
  - Candidates shortlisted: 29 (Announced a day before the interview)
  - Total Interview rounds: 3

INTERVIEW QUESTIONS

1. **First Round (Technical):**
   - Duration: 30 mins approx
   - Started with a brief Intro, and then they asked about my projects and some ML terms (like accuracy, F1 score, random forest, decision trees, etc.). Then they asked a guesstimate (no. of students studying in 12th standard), followed by two standard puzzles.

2. **Second Round (Technical):**
   - Duration: 30-40 minutes
   - Questions from Resume, intern and projects(from the terms written in projects), then they asked about joins in a table(inner/outer/left). This was followed by a puzzle(from Brainsteller Easy) and a guesstimate. In the end, they asked about the company, why I wanted to switch, etc...

3. **HR Round:**
   - Duration: 15-20 minutes
   - General HR questions like weakness, strengths, about the company, about my intern, why I want to join and switch, about my family, etc.
   .

TIPS/SUGGESTIONS

- Read some info about the company (what it does) and your profile description.
- Prepare for each line and each word written in Resume
- Be confident.

ACCENTURE JAPAN
PROFILE : DIGITAL CONSULTANT
(BY ADITI CHOUHAN)

COMPLETE PROCESS

- **Technical test**
  - It consists of questions from cloud, block chain and some basic ML questions. There was also one problem of coding which was a basic one
- **Technical Interview**
  - In this interview they will ask you about situational questions and one coding problem.
- **HR Round**
  - In this question they will try to judge if you are interested in knowing company culture or not.

INTERVIEW QUESTIONS

- They just want to know your thinking ability. They will also ask you to go through your resume. Also try to give answers for situational questions in such a way so that it does not leave any negative impact. Try to be honest, if you do not know any of the questions just speak the truth that at that time you are not aware about it.
- **HR Round:** You can ask some basic questions about the company, it shows that you have gone through the company's website and want to know more about it.

VVF INDIA LTD

PROFILE : ENGINEER MANAGEMENT TRAINEE (EMT)

(BY ANUP SINGH)

PREPARATION RESOURCES

Aptitude test:

https://www.indiabix.com/

Group Discussion:

Practice GD with your friends or wing mates at least 3-4 times.

Technical Round:

Go through all your core subjects (Fluid mechanics, Heat and Mass Transfer, Reaction Engineering etc.). Check the company's work (what product they manufacture, etc.).

HR round:

Prepare a writeup for the common HR questions like "Tell me about yourself?", "What are your strengths and weaknesses?" "Why do you want to join our company?"

Common Interview Questions

COMPLETE PROCESS

- **Aptitude test**
  - The test had two sections.
  - The first section was based on common aptitude questions, mainly on verbal, logical, and arithmetical skills.
  - The second section focused on Core Chemical Engineering questions, covering fluid dynamics, heat transfer, thermodynamics, and basic core knowledge. The questions were less challenging than quizzes or mid-semester exams but required a solid understanding of fundamental principles and theories.
- **Technical Interview**
  - The interview shortlist was announced a week before the interview. Approximately 24 students were shortlisted.
  - The interview consisted of **four rounds:**
    a) Group Discussion   b) Technical Round
    c) Leadership / HR round   d) Final HR round

INTERVIEW QUESTIONS

- **Group discussion:**
- Topic: "The future of Artificial intelligence and the role of engineers in that."
- We were given 2 minutes to think, and after that, GD started, and the discussion took 9-10 minutes. We gave our opinions and finally had to conclude it (Note that the conclusion is the most crucial part of GD, and all members must have a common opinion).
- The second panel topic was : "Cybersecurity in today's world".
- **Time duration:** 15 minutes approximately
- **Technical Round:**
- Around eight students were shortlisted for the technical round. This round was mainly based on our resume's and core concepts studied in the course. My interview started with introducing myself (give your intro in about 1 minute, not more than that).
- Then the interviewer picked up one project and asked me to explain all about the project- what was the objective, what I have done, and what was the impact. After that, the interviewer asked me core questions as I have done a project on heat transfer. Other questions were easy but to be answered quickly. The interviewer also asked about the courses I have done during my coursework and their industry applications.
- **Time duration:** 25 minutes approximately
- **Leadership / HR round:** This round was mostly on my family background, my strengths and weaknesses, and my achievements during my college journey. *(Do not describe your weakness in such a way that it gives a negative impression to the interviewer. Disguise a strength as a weakness).* The interviewer also asked some situation-based questions about the work environment. The questions were mainly general type, which is asked mostly in all HR rounds. **Time duration:** 20-25 minutes approximately.

- **Final HR round:**
- This was the final round of the interview. This was basically to know more about my academic and family background. The interviewer also asked about my willingness to relocate to Indonesia. The purpose of this round was to confirm my suitability for the role. Time duration: 20 minutes approximately.

TIPS/SUGGESTIONS

- Always be confident during the interview.
- Review your resume multiple times and create a detailed write-up for each project.
- Read about the company and the job description before the interview.
- Always ask the interviewer a question when given the opportunity. Avoid responding with "No, I have no questions." Instead, inquire about the company's future goals, work environment, and opportunities for professional development and continuous learning.

RELIANCE INDUSTRIES LIMITED

PROFILE : GRADUATE ENGINEER TRAINEE
(BY ADITYA SINGH KAURAV)

PREPARATION RESOURCES

Aptitude:
https://www.indiabix.com/

Technical:
Prepare Fluid mechanics, Heat and mass transfer and basic level of thermodynamics.

Interview:
Prepare a topic on which you are good enough as they will test your knowledge on that topic in depth and also be ready to answer any question on the projects.

COMPLETE PROCESS

- **Aptitude test**
  - This test was there to check both aptitude and technical understanding.The test was divided into several sections(all were time based), Some were focused on assessing aptitude, while others delved into the technical aspects. Almost all the people who have applied got shortlisted for the test, as such there was no resume shortlisting.

- **Technical Interview**
  - Shortlist was announced almost two days before the interview. There were three people who were taking my interview, one was HR and the other two were senior.
  - There was only one round, HR was there but HR round didn't happen for the CHE people.

INTERVIEW QUESTIONS

- First they gave an introduction and asked me to do so. After introduction, they asked some questions about my research interest and am I planning to do so? After that they asked what is your favourite topic- I told process design but they asked questions only on distillation design such as How can we reduce the diameter of a column, what is role of reflux in that, What will happen if C3-C4 mixture we are separating using distillation column, How can we run it efficiently? After that they came to my resume - asked questions about my projects and what I did, and the significance of that. I have written in technical skills DWSIM and ASPEN so they asked questions about them also. When they started asking questions on pumps and turbines, some questions I answered but then I said I have not much worked with them and one person accepted the other was not so chill.

TIPS/SUGGESTIONS

- Have some information the company- what are they doing, what are their major recent projects, etc.
- Prepare your answer for not going to research in place of job.
- Give good answer to the SOP questions as they will have a look on them during the interview or before the interview.
- Be confident

RELIANCE INDUSTRIES LIMITED

PROFILE : GRADUATE ENGINEER TRAINEE
(BY KUNAL BHOYE)

COMPLETE PROCESS

- **Aptitude test**
  - The General Aptitude Test with Chemical Engineering Concepts and basic Chemistry is a comprehensive examination designed to evaluate quantitative and verbal aptitude, logical reasoning, and their understanding of fundamental principles in chemical engineering and general chemistry.
- **Technical Interview**
  - As you prepare for upcoming interviews, it's essential to be aware that the conversation will likely revolve significantly around your resume, with a particular emphasis on your projects.Take the time to thoroughly review your projects, ensuring a clear understanding of the technical aspects and the impact they made.

INTERVIEW QUESTIONS

- During my interview, the conversation took a turn towards my internship at HPCL. I deliberately steered the discussion towards the petrochemical plant and, more specifically, the distillation column. However, be prepared for something unexpected as the conversation extended into plant design, focusing on how crude oil converts to various value-added products like petrol. The interview lasted for about 20 minutes, and after discussing the plant design, the questions shifted towards mass transfer, which was a natural extension from the distillation column. The key takeaway here is to choose your starting topic wisely, as it can shape the direction of the entire interview. Make sure to have a solid understanding of the basics, as you never know where the conversation might lead.

TIPS/SUGGESTIONS

- Review and thoroughly understand your projects.
- Practice solving online Gate chemical engineering tests.
- Revise the concepts taught by our professors.

INDXX
PROFILE : MANAGEMENT TRAINEE
(BY SHREYANSH PACHAURI)

PREPARATION RESOURCES

Aptitude test:
IndiaBIX
Prepleaf
CAT Previous year questions

DSA:
Interview Bit
Aditya Verma's YouTube Playlists
Striver SDE Sheets(All)
Striver's Playlist
Leetcode for Practice

SQL:
SQL Tutorial (W3Schools)
SQLBolt
50 Best SQL Query Interview QnA
Online Cheatsheets

Programming:
Python, C++, MATLAB, Knowledge of OOPs and DBMS from Geeks for Geeks

COMPLETE PROCESS

- **Aptitude test**
  - There was a 60 minutes long Aptitude Test where we had to solve 67 questions based on basic aptitude. The questions involved Quantitative Aptitude, Verbal Aptitude, Data Interpretation and Logical Reasoning. The level of the questions was medium. There was a CPI based shortlisting for the Technical Test.
  - CPI Criteria for Technical Test: 7.0
  - Number of students shortlisted for the Technical Test: 136 (approx)

- **Preplacement Talk**
  - On the basis of Resume, CPI and performance in the aptitude test 90 out of 136 were shortlisted for the PPT. It is important to attend the PPT because we get to know about how the company functions and what the one can expect during the interviews. Being present in the PPT helps you in the Interviews especially in the HR interview.

- **Interview**
  - Interview shortlist was announced just a day before the interview. There was just one interview round and the panel consisted of 3 interviewers: 1 from the Finance Department, 1 from the Tech Team and 1 from the HR Department. The interview was multidimensional and the three interviewers judged us mainly on the following factors: Projects on Resume, Financial Knowledge, Technical Questions and HR Questions. There was no schedule for the interview but the recruiters were calling the candidates according to their preferred list.
  - No. of shortlisted students: 35 approx

INTERVIEW QUESTIONS

- **Resume based Discussion:** Since it was a FinTech Company and I had done my internship in a FinTech Startup they asked me about the project I had done during the internship. It was a kind of a Credit Scoring Model and I was asked about what kind of data I had used, What were the features of my dataset and what model did I use. There were many counter questions on those. One must prepare their projects well since there can be many counter questions on the projects.
- **Financial Knowledge:** While they did not explicitly ask any questions related to Financial Markets (**Basic knowledge of Financial Markets** was mentioned in the Job Description) yet my internship at a FinTech Startup helped because I had prior Financial Knowledge.
- **Technical Questions:** They expect us to have Technical Knowledge about Three Technologies which include: Python(Preferred)/C++, SQL and MATLAB. The interviewer asked me questions related to Coding Problems which were as follows:

Financial Knowledge:

1) Having Coursera course like Financial Markets by Yale University. Certifications such as that of Finlatics Hub can be useful. If you have certifications such as the CFA (Level 1) cleared it would be a peak in your resume and would help you standout in the interviews.

2) Read the Job Description and look for the domain in which the company is working and research about that on Investopedia. I researched about Indxx and learned the basics of Indices and the Standard Indexxing methodology from various sources online such as Investopedia, The Economic Times and also read about various Corporate Actions which affect Market Indices. Researching about the company before the interviews can help you stand out.

3) Having Projects and Courses related to Finance on the Resume could be helpful. I had done the course Machine Learning for Economists and had previous Work Experience in the FinTech Sector which helped me during the interview. Projects of Finance and Analytics Club related to Mergers and Acquisitions, Financial Markets and Credit Risk Management could be important for someone looking Placement in the field of FinTech or Finance.

HR round:

Get prepared with the HR questions in advance as they will be asked in almost every company. Prepare a doc of your answers to the HR questions. Believe me you will benefit from this. Also try to be realistic in the HR interview and do not try to boast your achievements since they would have already seen your resume and they would be judging you based on your behavior to various situations..

1. Store the Frequency of all the characters in a String in a data structure and How would you get the frequency of special characters such as '#', '%', etc. (Hashing, ASCII Code concept)
2. SQL: You are given a table of 10000 entries. You have to find the 11th largest entry from that. Since I was a beginner in SQL and only knew the basics, I tried to solve the question but was unable to solve it. The interviewer then asked my approach and I told him. He then asked me to solve the same problem in Python. I told the interviewer then that since I only know the basics of SQL and have used MongoDB during my internship, I am not very proficient in DBMS and hence I was unable to solve the question. My approach however was correct.
3. Related to String Comparison: You are given two Strings How would you compare them. (Character wise Comparison of the strings. You have to print the string which is Lexicographically the higher one)
4. Given an array of size N. How would you find the K smallest elements. Also optimize the Time and Space Complexity of the algorithm. (Standard question on Heaps)
5. I was also asked a few objective (Theory related) questions about Linked Lists, OOPs, DBMS (since I had worked with MongoDB during my intern) and implementation of Heap Data Structure in Python.
6. I was also asked 1 Aptitude Question related to Work and Time. It was a Quant question and I was given 3 minutes to solve.

Tips:
Be thorough with DSA in C++/ Python. Even if you don't know certain syntax, you must be good at writing PseudoCode as they will judge you based on your approach. Also practice SQL questions from certain source as they are asked in many companies. Knowledge of DBMS, OOPs, Data Structures and Algorithms would be helpful.

d. Behavioral / HR questions:
I introduced myself briefly. They asked some general questions about my daily background and there were a few questions about the strengths and weaknesses. Then they asked me about something which I had done and is not on my Resume. They asked me about life at IIT K, what I do in my leisure time and my hobbies. I told them that I like reading and writing Hindi Poetry. Then to conclude they asked me to recite some poetry to them and accordingly I recited the following lines :)

> "हज़ारों तमन्नाएँ होती हैं दिल में हमारी तो बस इक तमन्ना यही है
> मुझे इक दफ़ा अपना कह के पुकारो बस इस के सिवा कोई हसरत नहीं है"

TIPS/SUGGESTIONS

- Research well about the Company and the work it does before your interviews. It helps a lot.
- Also do not miss the PPTs since you get to know about the company during that and it helps a lot during the interviews.
- Try to align your profile and introduction with the job description
- Be authentic about what you mention in the Resume and prepare your Resume well.
- Never say that you are inclined towards higher studies/pursuing MBA in near future.

ICICI BANK

PROFILE : MANAGEMENT TRAINEE

(BY SUSHMITA)

PREPARATION RESOURCES

Quant & Aptitude:
Prepleaf
QuantApti

ML-
https://www.geeksforgeeks.org/batch/dsa-4?tab=Chapters ,Andrew Ng course on Basics of Machine learning

HR Round:
I highly recommend proactively preparing a document with your responses to common HR questions in advance, as they are likely to be asked in almost every company. Having a well-thought-out document of your answers will undoubtedly benefit you during interviews and enhance your overall preparedness for the hiring process.
SQL: SQL Resources

COMPLETE PROCESS

- **Technical Test**
  - Duration: 45 minutes
  - After Technical Test 120 students were shortlisted for Occupational Personality Questionnaire (OPQ)
- **Occupational Personality Questionnaire (OPQ)**
  - **Objective:**
  - Designed to assess the personality traits and behavioral tendencies of candidates.
  - **Key Aspects Evaluated:**
  - Communication Style: How individuals express themselves.
  - Interpersonal Skills: Ability to work effectively with others.
  - Work Preferences: Personal preferences related to work tasks and environments.
  - **Questionnaire Structure:**
  - Consists of 104 questions.
  - Each question comprises 3 statements.
  - Candidates choose one statement that is most like them and one that is next most like them.
  - **Time Allocation:**
  - No strict time restrictions, but candidates typically complete the questionnaire in 25-30 minutes.
  - After this round 88 students were shortlisted for the next step.
- **Group Discussion(GD round)**
  - Number of Groups: 8
  - Each group comprised 11 candidates.
  - **Format:**Upon entering the room, candidates were provided with a sheet of paper containing a case study.
  - After Group Discussion around 30 students were shortlisted for the interview .
- **Technical +HR Interview**
  - The process was comprehensive, encompassing discussions on my **professional experiences, technical projects,** and **personal preferences.**
  - During the interview, there were **two interviewers**, one focusing on **technical questions** and the other on **HR-related inquiries**.
  - **Conclusion:** Overall, the interview process was smooth and comprehensive, covering both technical and HR aspects of my profile. It provided a well-rounded understanding of my skills, experiences, and suitability for the role.
  - After the interview **10 students** were finally selected .

INTERVIEW QUESTIONS

- **Technical Test :**
- General Aptitude: Multiple Choice Questions (MCQs) covering a range of general aptitude topics.
- Logical Reasoning: MCQs assessing logical thinking and problem-solving skills.
- Data Interpretation: Questions focused on interpreting data and drawing conclusions.

- Programming: Coding questions in Java, C++, and Python.
- Evaluate code snippets to determine output.
- Machine Learning: Assess understanding of machine learning concepts. Application-based questions related to data mining techniques.
- Total Questions: Approximately 70 MCQs
- Preparation Focus: Brush up on general aptitude and logical reasoning skills.Review coding concepts in Java, C++, and Python.Enhance knowledge of machine learning principles, especially data mining.
- **Occupational Personality Questionnaire(OPQ) :**
- For each question, choose the statement that best describes you:
- I prefer working independently.
- I enjoy collaborating with others.
- I am comfortable with a balance of independent and team work
- **Group Discussion(GD round):**
- Number of Major Cases Discussed:
- Four significant case studies were deliberated during the discussions.

1.Formalization of Economy

2.Blood Donation Drive

3. Electric Vehicle

4. Buy Now Pay Later (BNPL)

- My topic was Buy Now Pay Later ; Case:
- The second-year student facing financial challenges could benefit from the "buy now, pay later" strategy as it provides a flexible payment option, helping him better manage his finances.Discuss about his situation and BNPL.
- **Technical Interview:**
- **Background Overview**
- The technical interview began with the standard request for a brief self-introduction and a thorough review of my resume. The interviewer then delved into my internship experience as Quantitative Analyst Intern at Irage Broking Services, specifically focusing on analytics and finance.
- **Technical Project Discussion**
- I was prompted to discuss a recent technical project, and I chose to elaborate on the Stock Price Prediction project using ARIMA. The interviewer scrutinized my explanation, seeking details on each term I used. The discussion then evolved into real-world scenarios, with the interviewer asking how I would address challenges using machine learning algorithms.
- This went for around 25 minutes.
- **HR Interview:**
- **Personal Background**
- The HR interview commenced with questions about my hometown, providing a more personal touch to the conversation. Subsequently, the interviewer inquired about my knowledge of ICICI Bank, establishing a connection between my personal background and financial awareness.

- **Preferences and Fit for the Role:**
- The discussion then shifted to my preferences regarding the location within the Pan India setting and my reasons behind the choice. I was asked to articulate my interests in finance, analytics, and product-related domains, elucidating why I believed these areas aligned with my career goals. Additionally, I was prompted to explain why I considered myself a good fit for the role.
- **Strengths and Handling Pressure**
- The interview concluded with questions about my strengths and how I manage work pressure. This provided an opportunity to showcase not only my professional capabilities but also my ability to thrive in a dynamic work environment.
- This went for around 15-20 minutes.

TIPS/SUGGESTIONS

- Be crystal clear on the projects you have done.
- Confidence is crucial—70-80% . Technical prowess matters, stay calm, know your resume.
- You can never prepare with 100% resources, just select what you find useful and complete that resource. Stick to limited resources and do them honestly
- Try to apply to maximum companies that come, interview experiences are valuable and will make you ready for the D-Day.

INDXX

PROFILE : MANAGEMENT TRAINEE

(BY MD SAIF)

PREPARATION RESOURCES

Aptitude Test:

Prepleaf
Complete guide to Aptitude Preparation - Codestudio

SQL:

Youtube video lecture
SQL Tutorial

Puzzles:

50 challenging Problem Brainsteller (Brainstellar)

HR round:

Get prepared with the HR questions in advance as they will be asked in almost every company. Prepare a doc of your answers to the HR questions. Believe me you will benefit from this.

Basic Questions: HR questions

COMPLETE PROCESS

- **Resume Shortlisting**
  - Cpi criteria 7+
- **Aptitude Test**
  - General aptitude/reasoning/Basic english questions were asked but it was very easy and consisted of around 60 questions in 65 min.
- **Pre Placement Talk(PPT)**
  - Around 90 students on the basis of test score are shortlisted for PPT
- **Technical Interview**
  - Interview shortlist was announced just a day before the interview. But they are the subset of those selected for PPT(around 30+ students were shortlisted as it was day 5 company so others got placed before). The interview consists of various questions based on resume, SQL, Puzzles/Aptitude, HR.

INTERVIEW QUESTIONS

1. Initially they asked various things in resume(questions are to the point, they asked me to define the terms and what i have done in my internship and projects).
2. They they asked me very easy aptitude questions such as a clock is losing 5 min in each hour and it starts from 12 noon, then what would be the time shown at 12 midnight. Then after giving the answer they told me to write python code for this question.
3. Then they asked me some HR question like, (why not Core chemical engineering, why not Higher Studies, etc).
4. They also asked some basic question on SQL(A table of 10000 entries consists of students names and their marks and I have to provide 4th rank person).
5. Then they asked a question on python programming(I don't remember but It was something to compare two string and perform some operation).
6. They further asked HR questions.
7. Lastly they asked an aptitude question such as there are two or more consecutive number and I have to find the possible combination(Possible value of n) of these consecutive number so that their sum is 105.

TIPS/SUGGESTIONS

- Read about the company, what it is all about and what will be your role in advance.
- Try to align your profile with the job description
- Never say that you are inclined towards higher studies/pursuing MBA in near future
- Company are more interested in your brains and thinking skill, They wants to check how you think while solving any problem (Try to discuss problem and solution, this will help you a lot)
- Try to engage with interviewer as much as you can
- Be confident.

ICICI BANK

PROFILE : MANAGEMENT TRAINEE/ANALYST
(BY HARSIT SINHA)

PREPARATION RESOURCES

Aptitude Test:
Practice the Previous year's CAT questions. Many times, CAT questions directly come in OAs. I feel people usually struggle with data interpretation questions more than quant so a little practice of DI can give an edge.

Technical Test:
Obviously, GFG is your all-time resource. Also, coding always helps, so grind Leetcode. The basics of OOPs can be studied in a short time from any YouTube video.Prepare SQL. After a brief introductory video of SQL, you should focus more on practice. HackerRank and Leetcode 50 SQL are preferred. I personally did Leetcode medium SQL questions to gain confidence. Search for top SQL interview questions; many SQL theoretical questions that were asked to me were directly from these lists.

COMPLETE PROCESS

- **Online Assessment**
  - The Assessment had 3 - 4 sections based on logical reasoning, verbal reasoning and technical skills. Technical skills contained questions on C++ fundamentals and OOPs. Other questions of aptitude were CAT-type questions.
- **Psychometric Test**
  - The shortlisted students were then given a cognitive ability test. You would be thrown a lot of questions in a short time. It is a good idea to go through the company values and culture for this type of test. This gives an idea of what companies are looking for in a candidate. There would be a lot of questions to judge your behavior; answering this based on these values can increase your chances of passing this test. I cleared the psychometric test of all companies based on this hack.
- **Group Discussion**
  - I always say that in GD, you just have to get noticed because there would be a lot of people sharing their views; you just have to stand out.
- **Interview**
  - The interview went like rapid fire with me. They kept me on my toes.

INTERVIEW QUESTIONS

- **Group Discussion:**
- Another favorite round for the companies. We were given a case study and around 10 min to analyze it. It was a case of a man who wanted to buy a car. His occupation and demands were given, and you had to suggest one among the three - EV, hybrid and traditional fossil fuel car.
- The group discussion gets real chaotic real soon. So, what I do is to start a GD. Starting the GD with good pointers gives some brownie points and gets you noticed. This helped me get through all my GD I have to date. However, it is not a sure-shot way to ace a GD. Relevance of points you raised, managing the flow of discussion and how you behave in general with others are always looked into consideration.
- **Interview:**
- First, they grilled me on my internship project. They need to be convinced about the project's relevance. If you chose one parameter for your model, then why not others?.. How can you improve this model?.. kind of question. Then they moved to my course project. This was a CS771 project. They asked in depth about some ML models and why I used them. If you choose a random forest, why is it better? What is the ensemble method, and how does Random Forest use it? Types of ensemble models? Difference between Bagging and Boosting? How does the loss function help in this prediction? were some of the questions. Finally they asked for location preference and the type of role you are looking for.

Psychometric and Group Discussion:
As mentioned, for psychometric tests, go through the company's website and study their values and culture. For GD, you can look at some YouTube videos, especially some B-School GDs. I didn't give mocks, though it is a good simulation of how general GDs look like. Also, before GD, a quick Google search for GD topics will give an idea of what is in the news and what can be asked.

Data Science / ML:
Instead of suggesting CS771 slides (which is definitely good), I would suggest IME672: Data Mining and Knowledge Discovery slides. It is the most comprehensive slide on the topic. I don't know if I can put it here. If you can't find it, ping me. Also, ChatGpt is an excellent source to learn any topic.

TIPS/SUGGESTIONS

- Confidence is the key, though not overconfidence.
- Don't entirely rely on one profile. Be prepared for two or three, especially in these challenging times.
- Prepare your resume well; don't unnecessarily put random buzzwords if you are not confident.
- Give mocks or practice with your friends for an interview..

INDXX

PROFILE : MANAGEMENT TRAINEE(SDE)

(BY ISHAN SINGH)

PREPARATION RESOURCES

I wanted to get into SDE roles, so I started my preparations during the summer break itself and practised problems from Leetcode and InterviewBit. For DSA, I solved Striver's sheet. After I was finished with DSA, around October, I started learning OOPs concepts, SQL, and DBMS since they are asked in almost every interview. Simultaneously, I also solved puzzles and probability questions.

DSA:
- Problems - LeetCode
- InterviewBit
- Strivers A2Z DSA Course/Sheet - Crack Any FAANG or PBCs
- C++ Interview Questions (2023) - InterviewBit

COMPLETE PROCESS

- **Aptitude Test**
  - The assessment was taken in an online format in the lecture halls. While the questions were generally straightforward, they threw in a time crunch. You had to be quick to get through it all. I had solved almost all the questions and was shortlisted for the interviews.
- **Technical Interview**
  - The interview shortlist consisted of around 33 students, which was announced the night before the interviews. I was the fourth to go in. There was only one round, and the panel consisted of three people: a very senior member of the company, the tech lead and an HR.

INTERVIEW QUESTIONS

The interview began with a formal introduction from my side, after which the HR asked me some common questions like:
- What are your strengths and weaknesses?
- You live in Noida; how will you travel to Gurgaon, which is far away?
- Some questions about my family, friends and my four years at IIT Kanpur.
- Questions on leadership skills and the initiatives that I took during my PORs.

Then, the Tech lead took over and started asking questions about the projects listed in my resume. I had done a project using SQL, so he asked me to explain it. He did some cross-questioning and asked me 2 questions to be solved using SQL. I don't remember the questions exactly. I remember solving the first question using Common Table Expression (CTE) and the second using Window Functions.

He asked me the language I was comfortable with, and I replied with C++. Then, he asked me two questions. One was based on Wildcard Pattern Matching (Wildcard Matching - LeetCode). I was able to solve this question and wrote the pseudo-code on paper. Then, he asked me another question, which I told him could be done with the help of ASCII values. I told him the approach, and he was satisfied and told me not to write the code.

After the tech lead was over with his questions, the senior guy took over and asked me a few behavioural questions and a puzzle: In how many ways can 105 be written as a sum of two or more consecutive natural numbers?

The interview went on for about 45 minutes and was a good experience overall.

OOPS:

- Complete guide to Oops With C++ - Codestudio
- C++ Classes and Objects - GeeksforGeeks
- Object Oriented Programming in C++ - GeeksforGeeks

SQL and DBMS

- SQL for Data Analysis | Udacity
- SQL 50 - Study Plan - LeetCode
- DBMS - Complete guide to Database Management System - Codestudio

Puzzles and Probability:

- Puzzles - GeeksforGeeks
- https://brainstellar.com/
- Fifty challenging problems in probability with solutions

HR Questions:

Top HR Interview Questions and Answers: Freshers & Experienced (2024) - InterviewBit

TIPS/SUGGESTIONS

- Start your preparations as early as possible.
- Summers to placements in December is a long and sufficient time. Prepare diligently and try to solve questions on your own to the best of your capacity rather than jumping to the solution.
- Devote a good time to revision, or you'll begin to forget things you did weeks back.
- Be consistent and get a good company of friends. You've got a long journey ahead, and having friends who always motivate you is necessary.
- Get your resume verified by at least 10 seniors, and **DO NOT** lie in your resume. Be thorough with each and every point that you have mentioned.
- Remain in constant touch with your seniors and take suggestions from them whenever you feel stuck.

FUTURES FIRST

PROFILE : MARKET ANALYST

(BY RONIT AGARWAL)

INTERVIEW QUESTIONS

- Mostly HR questions were asked in first round.
- Started with Intro then : Why trading, why futures first not axxela, nearly around 10 mins round.. just need to show interest in this profile
- In round 2 there were HR and technical questions - HR questions were similar to 1st round and they asked me about my strategies how I trade as I said that I do trading and talk on current market news and how can they affect stocks prices and some cases if this is going on how stock price affects and why.

TIPS/SUGGESTIONS

- Role is hectic, if you are interested then only choose it otherwise life is hell there, having some hands on experience in trading and good strategies is good or projects can be beneficial, moreover you need to show your interest, dedication, motivation in this profile.

PREPARATION RESOURCES

For it u need to be quick in maths, speed maths round are there before interview (fastest finger press type) and a little bit knowledge about finance and F/O will be a plus

AURONOVA CONSULTING

PROFILE : RISK MANAGEMENT CONSULTANT
(BY ADITYA KUSHWAHA)

PREPARATION RESOURCES

If you have the ML projects in your resume,be prepared with the medium level ML questions for the interview.
Aptitude test:https://www.prepleaf.com/
Guesstimate: Prepare Guesstimate_kgp.pdf with your friends
Cases: I have prepared cases for product roles earlier. Consulting cases I have done just before the interview day. My friend suggested me to watch video of IITB interview cracked.This playlist I have followed:
Session #1 - Introduction to Case Interviews Prepare with your friends
HR round: Get prepared with the HR questions in advance as they will be asked in almost every company. Prepare a doc of your answers to the HR questions. Believe me you will benefit from this.

COMPLETE PROCESS

- **Aptitude Test**
  - Google Form Test , aptitude questions , question paper attached here:
  - https://drive.google.com/file/d/1rgrSv_Pz5Nvwsi1XklT4GzhaiNVDQvCe/view?usp=sharing
- **Technical Interview**
  - The panel comprised 4-5 individuals.
  - Duration: Approximately 1 hour to 1 hour 15 minutes.
  - Within 5 mins, I was asked to proceed to the second round.

INTERVIEW QUESTIONS

- Initially, there was an in-depth discussion on one of my projects centered around logistic regression. This was followed by another thorough examination of a project involving Time Series forecasting,accompanied by intricate questions on linear regression.
- Proficiency in the mentioned projects were crucial. Additionally, there were basic puzzles, such as determining the total number of squares on a chessboard.
- Three SQL questions were posed, one of which was advanced while the others were relatively straightforward. Subsequently, I was presented with a case study scenario. The task was to determine the target customer base for a shopping complex planning to offer credit cards exclusively for use within their stores.
- In the second round, we started with a mix of technical and HR questions. First, I tackled a couple of puzzles that were not too hard. Then, we delved into one of my projects in detail, especially one that we didn't talk much about in the first interview. After that, they threw in a fun question about estimating how many fans Alia Bhatt might have in India.
- Finally, I answered some straightforward HR questions, like why I wanted to work at Auronova Consulting.
- Duration of about 30-35 minutes.

TIPS/SUGGESTIONS

- Read about the company, what it is all about and what will be your role in advance.
- Try to align your profile with the job description
- Never say that you are inclined towards higher studies/pursuing MBA in near future
- Be confident

ICICI LOMBARD GIC LTD

PROFILE : SENIOR MANAGEMENT ACTURIAL ANALYST
(BY RIYA SAINI)

PREPARATION RESOURCES

1. **Puzzles:** https://www.geeksforgeeks.org/top-100-puzzles-asked-in-interviews/ , https://brainstellar.com/
2. **Aptitude:** https://www.indiabix.com/
3. **General Resources:** Samanvay-Collecting other docs for placement
4. **HR Questions:** HR Interview Preparation Resources.docx

COMPLETE PROCESS

- **Aptitude Test**
  - General Aptitude questions were asked including Data Interpretation, Arithmetic, Verbal and Paragraph type questions.
- **Resume Shortlisting**
  - Following the aptitude test, a resume shortlisting process took place. Based on this, candidates were selected for the Technical Interview. Approximately 18-20 students were shortlisted for the interview.
- **Interview**
  - Interview shortlist was announced on the same day of the interview. The interview consisted of **2 rounds.**

INTERVIEW QUESTIONS

- The interview consists of **2 rounds** as follows:
- **Technical Interview(Round 1):** The interview began with a self-introduction, followed by questions about the company and its operations, particularly focusing on the factors influencing the decision to provide insurance (ICICI Lombard being an insurance company). After that, questions were asked from my resume more diverted towards my Internship. Then, they gave me three puzzles which were Puzzle 15 | (Camel and Banana Puzzle) - GeeksforGeeks , probability questions based on the A Union B Union C formula, Puzzle 24 | (10 Coins Puzzle) - GeeksforGeeks . At last they ask me if I have any questions for them.
- Only 6-7 students were selected for round 2
- Time Duration: 30-40 min
- **Technical- HR Interview(Round 2):** In this round, first I was asked questions again from my resume. Some questions include explaining the algorithm I used and what R2 is and writing its formula. And then I was asked a simple puzzle. There are 2 fathers and 2 sons, they go fishing and they all catch fish. But the fish count is only 3. How's that possible?
- Then he asked me about my goals and about the company. After that he asked me what kind of work I hate to do. I understood it was a trick question as I cannot criticize someone's job. I told them that I don't like a job which is static or repetitive. Then he told me that there will be a time where you will be doing the same job but then I told him in the tech world you are always learning every time a new software comes.
- After that he asked me if I had any questions for him.
- Time Duration: 30-40 min
- 3 students got offer and I was one of them

TIPS/SUGGESTIONS

- Prepare a document containing your anticipated HR responses before the interview
- Always prepare your resume well, you should know about the words written in your resume
- Before going for any interview, you should read about the company, what it does and what are their future plans.
- Prepare two-three questions that you are going to ask after your interview gets over
- Stay calm and always give your answer in confidence. If you don't know the answer then say that you cannot recall it now but don't give them wrong answers

MICROSOFT
PROFILE : SOFTWARE
ENGINEER(SWE)
(BY HARSH SACHAN)

PREPARATION RESOURCES

- Explore YouTube to learn different topics. Search for specific concepts or algorithms that you want to understand.
- **DSA Preparation:**
- https://neetcode.io/practice
- **Striver Sheet**
- https://leetcode.com
- Pay extra attention to Binary Search on Answer, Dynamic Programming, Digit Dynamic Programming (DP), as well as concepts related to Trees and Graphs in your preparation.

COMPLETE PROCESS

- **Coding Test**
  - The coding test consisted of two questions with a duration of 2 hours.
- **Technical Interview**
  - The interview consisted of **2 rounds.**

INTERVIEW QUESTIONS

- **Coding Test:**
- First Question (Medium Level): You are given an array of integers. You can concatenate any two adjacent elements. Find the maximum sum possible after concatenation.
- Sample Input:

5

1 21 30 4 1

output:

2172 (1+ 2130 + 41 = 2172)

Hint: DP

- Second Question (Hard Level):
- Problem: Given an array of positive integers, the task was to find the maximum possible sum of pairs of elements. The condition was that there should be no common digits between the elements in each pair.
- Sample:

Input:

5

152 912 776 123 881

- output:

1688 (912 + 776) no common digit

Hint: Think about bitmask of size n only 1024 possibilities are there.

- **Technical Interview:**
- **1st Interview (Technical):**
- **Warm-up Coding Question:**

1)Count the number of set bits in an unsigned integer.

2)Bruteforce TC: O(n) (n = number of bits)

3)Optimization TC: O(number of set bits) (Hint: Try n&(n-1))

- **Resume and Internship Questions:**

Discussion on your resume and details about your internship experiences.

- **Coding Question:**

Given a 2D matrix of characters, you can travel in all 8 directions. Print the path of a given word if present in the matrix.

- **2nd Interview (Technical):**
- **Resume Grilling on Internship:**

In-depth questions about your internship experiences and roles.

- **Coding Question:**

In the snake and ladder game, find the minimum number of moves required to win the game. (Hint: BFS)

Similar Problem: https://leetcode.com/problems/snakes-and-ladders/description/

- **Design Question:**

Design a data structure to store text written in MS Word.
1) Supports Undo/Redo.
2) Stores properties of characters (Bold, Color, Font, Font Size, etc.).
3) Allows typing text in between words and deleting characters in between.

- **My Approach:**

1) Characters stored as a linked list.
2) Properties mapped under a stack.
3) Global stack for undo operations.
4) Link list for efficient insertion and deletion.

- **Suggestion:** Discuss and explain your thought process with the interviewer, ensuring they understand your approach and direction.

TIPS/SUGGESTIONS

- Make Quick Notes: Create notes for standard problems to revise easily later. Consider using Notion for organized and accessible note-taking.
- Participate in Contests: Stay active on platforms like Codeforces, Leetcode, and Codechef. Engage in contests to enhance your problem-solving skills.
- Learn Basics: Watch YouTube videos to cover the basics of Operating System, Database Management System (DBMS), and Computer Networks.
- Practice Regularly: Cover all essential topics and practice consistently to build confidence in solving Data Structures and Algorithms (DSA) problems.