Recruitment Process
&
Interview Experience

INTERVIEWEE
TESTIMONIALS

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Domain:

ANALYTICS

Sector: Healthcare Analytics.

Name: *Arush Kaushal (2020H1290014P)*
Company: IQVIA
Profile: Primary and secondary research

Recruitment Procedure
- Resume shortlisting and interview
- Questions asked in Interview :
    - Tell me about yourself
    - What are your strengths and weaknesses?
    - Where do you see yourself after 20 years?
    - One coding question to solve
    - Tell about the company

Sources of Preparation
See the previous year question from glass door and have basic knowledge about the company and your subject and good thinking abilities on programming (learn any basic language)

Courses and Certification
Learn courses like Python, Excel.

Other Relevant Information
Keep putting hard work and convince the interviewer that you are fit for the job .

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Sector: Analytics

Name: *Akshat Garg (2018A2PS0099P)*
Company: Ola Electric
Profile: Business Analyst

Recruitment Procedure
- Round 1 : Technical Round
    - Resume grilling, questions based on relevant projects and your internship(s).
    - Have some knowledge of the company's recent announcements, business decisions and convince them why you are fit for the job and why you want that particular job.
- Round 2 : Technical +HR round
    - Questions based on your PORs, understanding of the analyst role.
    - Assessing if the student took part in co-curricular activities along with keeping his CG in mind (abv 7.5 suffices).
- Round 3 : HR Round
    - Light hearted conversation with questions like why Ola, why BA at Ola, PS experience, experience with data and how data plays a central role in business.

Sources of Preparation
Generic HR questions, mock interviews with friends. Know every point written in your CV thoroughly and have justifications for missing points.

Courses and Certification
None on CV. Do prepare for SQL , Python, R, Excel. Skills that come handy in the job environment.

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Other Relevant Information

- FIT focused rather than SKILL based. You need to be able to convince the recruiter why you wish to join that particular organization and not work in some other sector.
- To answer this, apart from preparing about that one company, you need to know of other job opportunities specific to your profile and then justify why this job among all the choices you have.

Sector: Analytics

Name: *Chandan Pandey (2017B1A21011P)*
Company: Ola Electric
Profile: Business Analyst

Recruitment Procedure
- Technical Round:
  - The first round started with some basic questions based on my resume. The interviewer inquired about the different analytical tools commonly used in the industry.
  - Detailed and insightful questions were asked about the projects I had done during my PS II and previous internships. This was followed by an analytical problem specifically concerning the company.
  - The second round was taken by a BITSian and was also based on the resume, and my choice of projects and PORs were discussed in length. The round concluded with some situational interview questions.
- HR Round:
  - This round was not a typical HR round that everyone expects. However, the setting was very light hearted and casual.
  - The interviewer asked me about my personal experiences from my previous internships. I was also presented with some virtual scenarios to judge as to how I would react.
- Aspects of Preparation to be focused upon: Aptitude training, Interview Questions, Coding Practice (Python, SQL, etc.)

Sources of Preparation
Examly, w3schools, Coursera/Udemy (for SQL, R, Python, etc.)

Courses and Certification
(SQL, Python, R, Advance excel) – Coursera/Udemy

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Other Relevant Information

Try and relate the projects you have done to the required profile, also, attract attention to your recent projects and your PS in general. A good grasp of writing complex queries of SQL will certainly go a long way and above all, stay confident and firm.

Domain:

BANKING & FINANCE

Sector: Banking & Finance

Name: *Anjali Sudhakar Bandewar (2017B4A30639P)*
Company: Goldman Sachs
Profile: Quant

Recruitment Procedure
- Pre-placement talk, Online test, 2 rounds of interviews.
- Online test consisted of 2 coding questions, MCQs , advanced coding section, and a subjective section with two (situation oriented & motivation driven) questions.
- Interview Round 1: Probability based questions were asked.
- Interview Round 2: Projects were discussed and a question was asked based on distributions (Statistics based).

Sources of Preparation
GeeksforGeeks, LeetCode

Courses and Certification
Courses related to Probability & Stats, OOP, DSA

Other Relevant Information
Make the best use of your knowledge. Be attentive in all the evaluative components. Try to be as quick as possible while solving the MCQ's. Also, focus on the details in the projects mentioned in your resume.

Sector: Banking & Finance

Name: *Nayan Jain (2018A7PS0173P)*
Company: Goldman Sachs
Profile: Quant

Recruitment Procedure
- There were four rounds: Online Test + 3 interviews.
- Online Test had 5 sections:
    - The first section had two easy coding questions.
    - The second section had some MCQs related to Data Structures and Algorithms.
    - The third section had one medium/hard coding question.
    - The fourth section had two HR type subjective questions to be answered in less than 200 words.
    - The fifth section had MCQs related to Mathematics and Logical Aptitude.
- Interview Rounds:
    - I had applied for an SDE role, but surprisingly I was shortlisted for the Quant role. I realized this during my second interview! Thus all three of my interviews were full of puzzles and questions related to Probability, Statistics and Machine Learning (ML). Some behavioral/HR based questions were also asked in all three interviews.
    - Some of the puzzles that I got were:
        - Using just one biased coin, find a method by which you can still simulate an unbiased coin.
        - Probability that the whole amoeba population in a pond will die out some time in the future, given that initially a single amoeba exists and it can either die or multiply with certain probabilities.
        - You are supposed to stand in a queue with n people. The first person who has exactly one person ahead of them in the queue with the same birthday will get a gift. Find the optimal position in the queue so as to maximize your chance of getting a gift.
        - Probability that 3 randomly selected points on a line segment of unit length partition it into 4 line segments of equal length.
    - You are usually not supposed to solve the puzzles till a numerical answer. An explanation of the method/an equation is enough.
    - ML questions were mostly about Linear Regression, Logistic Regression and Classification in general. Some other questions were based on my

projects in this area.

Sources of Preparation

I had prepared for coding rounds using GeeksForGeeks and InterviewBit (Useful only in the online test round in this case). No preparation for puzzles and probability questions. ML knowledge was a result of courses and projects.

Courses and Certification

Courses on campus: Probability and Statistics, Applied Statistical Methods, Machine Learning.

Other Relevant Information

- The interviewers were really great and helpful. Clarify the question if you have not understood it completely. Think out loud so that the interviewer can help you when you get stuck.
- Revise some mathematical concepts like Integration, Trigonometry, and Logarithms (at least at a basic level). These topics are useful in Online Tests.
- Fill your resume with only those things that you know very well. Preferably try to add some projects related to Data Science/ML to also have a chance of being shortlisted for Quant role instead of SDE.
- Revise probability concepts. Make sure you know the Binomial Distribution very well.
- Some puzzles are just trick questions and can be answered without even thinking too much. Just be confident.

Sector: Banking & Finance

Name: *Shreyas Samir Kolte*
Company: Goldman Sachs
Profile: Quant Role

Recruitment Procedure
- Online Test, 3 Technical Rounds of Interviews
- The Test had 5 sections (This is the standard format of Goldman Sachs Online Tests) :
    - 2 easy coding questions on String Manipulation and arrays
    - Questions on Math: MCQs on Probability, Statistics, Set Theory, Calculus, Linear Algebra
    - Questions on CS Fundamentals: OOP, DSA, Computer Networks, C Fundamentals.
    - 1 medium level difficulty coding question
    - 2 short essay writing questions on handling conflicts among the team in projects and about your own innovation in a personal project.
    - To get shortlisted, you must complete at least 3 out of the above 5 sections. I could solve the easy coding questions and almost all the Questions on Math and CS fundamentals; however, I could not solve the medium difficulty questions because of time constraints.
- The company offers two roles: Quant and SDE. Depending on whether you do better in the Math sections or the Coding sections, you're selected for interviewing for the respective roles. However, you will not be made aware of what role you're being selected for. You will be able to guess that only when you begin the interview. In my case, it was Quant.
- Interview Round-:
    - Introduce yourself and tell me your technical strengths: I mentioned Machine Learning, Deep Learning, DSA, OOP and Statistics as my Strengths.
    - He went on to ask me some puzzles on Probability and Statistics and in one puzzle where a recurrence relation was being formed, he asked me to write a pseudocode to solve it recursively and also asked me its time complexity. I explained that the recursive solution was of exponential complexity but since there were overlapping subproblems, I would use Dynamic Programming (I wrote the pseudocode for Memoization) when

implementing it practically.
- The rest of the puzzles were mostly based on fundamental statistics, i.e., well known inequalities in statistics like Jensen's Inequality and concepts relating to Expected Value of some quantity in the puzzle.
- Pro-Tip: Whether or not you're stuck at any point, make it a habit to think aloud and explain your approach while solving. They usually give you hints to solve the problem and reach the solution.

- Interview Round-2:
  - Similar to Round-1 but I was asked more challenging statistics questions and some in-depth Machine Learning Questions about Anomaly Detection Methods and to come up with Counter-Examples where these methods would not work.
  - I was asked to describe one of my projects in depth and he kept asking me tougher and more challenging questions at each point till the point I could not come up with an answer. This was probably a sort of how well I can answer under stress. He also tried to misguide me by explaining a concept wrongly and asking questions on that.
  - Tip: Remember and/or revise our basic Probability/Statistics/ML concepts very well if you've mentioned these on your Resume. Also, you must be aware of every small facet of the projects that you've done.

- Interview Round-3:
  - This round had 2 Interviewers. The first one asked me about 2 of my best projects from my
  - Resume and again went in-depth into their details like the metrics I used to find the performance of the implemented models and the methodology.
  - She also asked me about ML concepts like Regularization and Dropout.
  - The second interviewer then gave me 2-3 Probability Puzzles. Again here when I made some calculation mistakes when solving them, she helped me out with hints because I was thinking out loud.
  - They then asked me if I had any questions for them. I asked about what is encompassed within the Quant role and described some projects they were working on. The Interview was then concluded.

- Tips and Preparation Materials (for both SDE and Quant Roles):
  - GFG Past Interview Experiences can give you a great idea about how the Online Tests are and what kind of questions they may ask for the SDE Role.
  - For the Quant Role, it will help if you have done one or more ML projects and/or some work related to Statistical Modelling and also are knowledgeable in Prob & Stats. I personally studied Statistics from

"Statistics for Business and Economics" by Anderson et al.

Sources of Preparation

- Computer Networks Notes (Credits: Harpinder Jot Singh, SDE, Amazon)
- DSA: Introduction to Algorithms (Cormen, Lieserson, Rivest & Stein),
- The Algorithm Design Manual (Steven S. Skiena).

Sector: Banking & Finance

Name: *Naga Madhu Hitesh Penjuru (2020H1060217P)*
Company: Markets and Markets
Profile: Associate Market research analyst.

Recruitment Procedure
- Video resume screening, 2 rounds of guesstimates.
- In the first round, we were asked to record a 2 min video with an introduction, highlight the recent achievements (if any), talk about our internships and about which domain we would prefer to be associated with if selected, and the recent trends/technology/innovations happening in that particular domain.
- Second round, we had a guesstimate round with the hiring manager. We were asked to do market sizing, market estimates.
- Third round was similar to the second, but the interview was with the chief resource officer.

Sources of Preparation
- Articles related to market sizing, market estimates.
- YouTube channel of IIM B,C consulting clubs.

Other Relevant Information
They will just look at your approach rather than your calculation during the guesstimate. Don't make unrealistic assumptions.

Sector: Banking & Finance/Management

Name: *Ribhu Gupta (2020H1440048P)*
Company: Markets and Markets
Profile: Market Research

Recruitment Procedure
- Video resume, Resume shortlisting, Interview, HR interview
- We were asked to make a short video resume with a duration of 20 sec-60 sec. They were then shortlisted and a group interview of shortlisted candidates was conducted.
- The interview included:
  - A brief introduction
  - General knowledge about the prevailing markets
  - Data interpretation
  - Data points identification for any new or existing business
  - Prediction of number of users for a given business model w.r.t Indian context
- HR interview:
  - This included user prediction
  - Data points identification

Sources of Preparation
No sources required as such just some general awareness and in extreme cases just stay updated with the ongoing news and happenings

Courses and Certification
No certification as such. Just awareness and ability to analyse and understand data.

Other Relevant Information
Just stay updated, aware and conscious about your surroundings.

Sector: Banking & Finance/Management

Name: *Shaiphali Natu (2020H1440044P)*
Company: Markets and Markets
Profile: Market Research

Recruitment Procedure

- A video resume was to be uploaded by the interested candidates specifying their name, branch, areas of interest and projects till date.
- Selection of candidates on the basis of video resumes.
- A group interview was conducted to identify the candidates with more analytical approaches relevant to market research, growth and strategy, as well as estimation with a logical backing for example, estimation of the number of annual Byju's subscriptions.
- Selection of candidates from phase-interview.
- Interview based on questions of data points as well as strategy and estimation relating to a business or a specific industry, for instance the cancer surgery robots' business in India.

Sources of Preparation

- https://www.mbacrystalball.com/blog/2020/02/10/market-sizing-questions-examples-answers/
- https://hackingthecaseinterview.thinkific.com/pages/market-sizing
- https://www.valuebasedmanagement.net/methods_ge_mckinsey.html
- https://saylordotorg.github.io/text_fundamentals-of-global-strategy/s07-02-measuring-market-attractivenes.html
- https://opentext.wsu.edu/cpim/chapter/6-1-measuring-market-attractiveness/
- https://www.myconsultingoffer.org/case-study-interview-prep/market-entry/
- https://igotanoffer.com/blogs/mckinsey-case-interview-blog/market-entry-case

Courses and Certification

No certification as such. Just a bit of analytical reasoning and estimation.

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Other Relevant Information

Proper analysis of the given market situation should be done, considering all the aspects with respect to society, income, other aspects and all possible constraints relating to the market growth and sale. All the data points should be taken into consideration and further estimation with a proper logical backing should be done.

Sector: Banking & Finance

Name: *Yatharth Gupta (2018A1PS0018P)*
Company: Standard Chartered
Profile: Techno Banker

Recruitment Procedure
- Coding Test, 2 technical interviews, 1 HR round
- Coding test consisted of 2 questions to be solved in 90 mins, 1 graph question simple DFS , another one was DP, a modification to LCS (least common substring).
- There were very few people selected from the coding round, the technical interviews generally revolved around my background about how I came to pursue chemical engineering, while taking up finance courses along with learning DSA for IT profiles.
- Not being from a CS background , my interviews generally were on general banking and covid and how it affected my life as well as the industry.
- The interviewers were very amiable and tried to make me feel comfortable as much as possible as this was my first interview ever.
- HR round seemed like a formality only, they asked about family background and where I was born and brought up, along with a brief discussion on my PS1 internship.

Sources of Preparation
Studied coding from Scaler Academy since I don't belong to a CS background. Practiced from Leetcode, InterviewBit and GFG.

Courses and Certification
Nothing much, had done 5 finance courses by this point so this might have been a benefit for this company.

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Sector: Banking and Finance

Name: *Paridhi Chaturvedi (2017B5A20920P)*
Company: Tata AIG
Profile: Product Tower Specialist

Recruitment Procedure
- Resume shortlisting, Group discussion, Interview 1, Interview 2
- Interview 1 was mainly based on our resume and the core branch. They started by asking us about the project that we have done, followed by a few follow-up questions on the branch that the product was based on.
- Interview 2:
  - Mix of logical questions based on how we could apply the knowledge of our branch to fit the job description.
  - They gave us scenarios where we had to give insurance to a civil engineering project and asked us what parameters we would look at to see whether or not to provide insurance to that project.
  - Another question was to predict if a place will be flooded in a particular season or not, given the rainfall and the sewage system details.
- The HR questions were:
  - What do you know about TATA AIG?
  - Why do you want to join? What made you apply for this company?
  - What would you be able to bring to the firm?

Sources of Preparation
- Case Interview Cracked videos on Youtube
- Some product management and consulting bootcamps on Seekho
- Masterclass on how to crack consulting case interviews that we found about on our BITS mail.

Courses and Certification

- The Certified Project Business Analyst course that was brought to us by the BITS MBA Industry
- Python for everybody specialization
- Data Analytics course on Coursera
- Data Science course on Udemy

Other Relevant Information

- Most job interviews and not just Tata AIG are FIT based rather than SKILL based. You need to be able to convince the recruiter why you wish to join that particular organization and not work in some other sector.
- To answer this, apart from preparing about that one company, you need to know of other job opportunities specific to your profile and then justify why this job among all the choices you have.

Domain:

CIVIL

Sector: Civil

Name: *Darna Ramanjaneya Sai Durga Narasimha Rao (2020H1440042P)*
Company: Arup Pvt. Ltd
Profile: Automation Developer - Intern

Recruitment Procedure
- Online Test, Online Interview
- Test had only one section:Coding test
- Test was medium level in difficulty. Problems could be solved quite easily if the knowledge of coding as well knowledge of data structures was there.
- For the interview, the questions asked were:
    - Tell us about yourself
    - Questions about the projects and technical skills that were listed in the resume and how would that profile make you more eligible
    - Questions about the coding test and how did you arrive at the logic for the code written as well as possible issues with the code and alternative methods for writing the logic for the code
    - Whether you are comfortable in switching to a new coding language to one that they seek at their workplace

Sources of Preparation
Prepare by learning any one recognized coding languages (C# preferable for the company) as well as prepare by writing as many coding exams to get a good practical experience on writing codes for a task.

Courses and Certification
No specific courses or certification required, but having both basic knowledge of civil engineering and coding expertise is recommended

Other Relevant Information
The interview is FIT based. It means that you will need to convince the recruiter that you are fit for the job and for the organization. Also, you need to be convincing that you will be ready to take challenges and are hungry for knowledge.

Sector: Civil

Name: *Divyanshu Gupta (2020H1430072P)*
Company: Arup India Pvt. Ltd.
Profile: IT Analyst - Geotechnical

Recruitment Procedure
- Online test, Technical/HR interview
- Online test had six coding questions which were to be completed in 90 minutes.
- The questions were easy but it is important to maintain speed to finish all questions.
- The questions were a combination of multiple simple logics and looked overwhelming at first, so it is important to actually understand them.
- Logic was more important than writing complete syntax as they examined all the questions manually.
- Interviewers were friendly and asked questions related to the resume, core civil and coding.
- They also went through my online test and cross verified my logics, additional questions were also asked related to the online test.

Sources of Preparation
Preparing for generic puzzles and logics can be helpful for the online test. In addition, knowledge of any programming language will be helpful in both online test and interview.

Other Relevant Information
This job profile is best suited for those who wish to pursue a semi-core and coding career.

Name: *Gayathri Gireesh Sujatha (2020H1440047P)*
Company: Arup
Profile: Cloud and Intranet App – Software Engineer

Recruitment Procedure

- Online test, 2. Technical/HR interview
- The online test had six coding questions (90 minutes).
- Try to figure out the logic rather than focusing on compiling.
- The three interviewers were amiable and the company's warm work culture was very evident from the interview.
- During the first half, they asked me about JS and my projects.
- The second half was focused on small logical coding questions and they went through my online test and cross-verified the syntax and the logic applied.
- If you are a beginner, focus on learning one language.

Sources of Preparation

Worked part-time as a coding instructor at Whitehat Jr (Byju's).

Courses and Certification

JS, front-end basics.

Other Relevant Information

This job profile is best suited for those who are interested in IT and civil.

Sector: Civil

Name: *Drishya Sajeev (2020H1430066P)*
Company: Atkins
Profile: M.E. Role

Recruitment Procedure
- Direct Interview
- Questions:
    - Self-introduction
    - Briefing of the subjects/electives mentioned in the resume
    - Follow up questions from what you answer from the projects given in the resume
    - Questions to trace SFD and BMD of beams & frames

Sources of Preparation
Have a clear understanding of each and every topic mentioned in your resume and prepare accordingly.

Courses and Certification
Simple questions related to the courses mentioned in the resume would be asked. Also, it would be an added advantage if you know ETABS software.

Other Relevant Information
It will be more like an interactive session and for that you need to brush up your concepts thoroughly. Even if you make any mistakes while answering, it is fine as your approach to the questions will be the basis for judging you.

Sector: Civil

Name: *Farzan A Azeez (2020H1430077P)*
Company: Atkins
Profile: M.E. Role

Recruitment Procedure
- Direct Interview
- Questions:
  - Asked about the company followed by self-introduction
  - Questions on SFD and BMD of frames were asked
  - Briefing of the nature of past work experience and projects mentioned in the resume
  - Follow up questions from what you answer from the projects and also work experience

Sources of Preparation
Prepare well for the topics mentioned in the resume. Understand the basic concepts related to structural analysis & design and present the answers clearly.

Courses and Certification
Knowledge on software would be helpful if equipped with conceptual understanding

Other Relevant Information
Consider the interview as a two-way process and use the opportunity to interact with an industrially expertized panel of professionals.

Sector: Civil

Name: *Praveen Kumar Reddy Mullangi (2020H1430068P)*
Company: Atkins
Profile: Structural Engineer

Recruitment Procedure
Resume shortlisting and technical interview.

Sources of Preparation
- Very fundamentals of structural engineering were asked in the interview. I studied the standard text of structural analysis. Any standard book would do.
- Secondly, questions from the projects that we have done at undergraduate level as well as from masters were asked.

Courses and Certification
- Matlab certification from mathworks.com
- Autocad certification and staad pro certification

Other Relevant Information
Be through with whatever you put in your resume.

Sector: Civil

Name: *P.L.N. Prasuna (2020H1430062P)*
Company: Atkins
Profile: Structural engineer

Recruitment Procedure
- Resume shortlisting
- Technical interview

Sources of Preparation
IS codes, any standard books for subjects related to structural engineering.

Courses and Certification
Matlab, Autocad, staad and Etabs

Other Relevant Information
Be thorough with all the topics in your resume.

Sector: Civil

Name: *Shankha Ghosh (2020H1430065P)*
Company: Atkins
Profile: Internship

Recruitment Procedure
Resume Shortlisting then Interview.

Sources of Preparation
Most of the questions are from ME and BE projects. Basic knowledge of ME and BE subjects is also required. If anybody has experience in this field then they also ask questions from there.

Courses and Certification
Software skills like Etabs, Staad pro, Safe etc. required

Other Relevant Information
Grade point above 7 will be enough to sit in the interview process. Also, you need to convince the recruiter why you need this job and how you will contribute to the growth of the organization.

Sector: Civil

Name: *Hari Sanjay TP (2020H1430067P)*
Company: Ramboll
Profile: Structural Engineer

Recruitment Procedure

- Resume shortlisting - Based on undergraduate projects
- Online Test - Based on undergraduate basic knowledge about core subjects
- Technical and HR Interview - Based on fluency and communication of English and technical knowledge.

Other Relevant Information

- They take into consideration 10th and 12th Marks for your recruitment process .
- Provide additional marks in recruiting for students with good undergraduate projects and software knowledge.
- Students with no history of backlog should be provided with additional marks.

Sector: Civil

Name: *Neela Sai Ram (2020H1430059P)*
Company: Ramboll India Pvt. Ltd.
Profile: Structural Engineer – Buildings Department

Recruitment Procedure
- Online Test, Technical Interview.
- Test had 2 sections:
    - Aptitude - 60 questions, 45 minutes
    - Technical – 40 questions, 60 minutes
- The online test was moderate in terms of difficulty. One with a basic knowledge of the undergraduate part of your respective specialization would be able to answer the questions. But the major thing to focus on is the time and speed.
- Questions in technical interview round:
    - Introduction
    - Projects which we have done
    - Conceptual questions on design checks of different structural elements.
    - Most concentrated topic is on flat slabs, because in most of the projects undertaken by the company they use flat slabs.
    - Well used codal provisions in our B.E and M.E.
- Answering the questions with a proper conceptual explanation, logical approach and not bluffing to the questions would help out.
- Knowledge on Euro Code would be an added advantage, yet no questions will be asked if we confess that we don't have any knowledge on Euro Code.
- One needs to show their interest in learning things and building up the knowledge which may raise a hope that, if trained well, he/she may perform great in the company.

Sources of Preparation
- Aptitude – IndiaBix Application
- IS 456, IS 875, IS 1893, SP 16, M.E and B.E Lecture notes, Interview experience reviews.

Courses and Certification

STAAD Pro , AutoCAD 2D

Other Relevant Information

- Most of the companies look into how the person will be performing if he/she is trained well.
- Make sure you know everything which you have put on your resume.

Sector: Civil

Name: *Rahul Laxman Patil (2020H1430076P)*
Company: Ramboll
Profile: Structural Engineer

Recruitment Procedure

- Online test:
    - 60 Aptitude questions 45 min
    - 40 technical questions 60 min
    - Test was easy but we have to maintain the speed and accuracy.
    - No negative marking
- Interview:
    - Introduction
    - Around 40 minutes
    - Particularly asked about the design procedures of all components in civil structures.
    - Focused on IS codes.
    - Fluency and positive attitude matters.

Sources of Preparation

- For test:
    - All notes of ME, notes from BE for technical aptitude
    - Online videos for general aptitude
- For Interview:
    - IS 456, SP 16, IS 1893, Design procedures for all components of structure.
    - Cross questions to given answers

Courses and Certification

Not asked for the certification of any particular course or software but took the aroma of structural design softwares like ETABS.

Other Relevant Information

They were not expecting the accurate answers but focusing on the way you manage to handle the situation. They gave importance to not giving up.The attitude of try and try add value to anything.

Sector: Civil.

Name: *Himanshu Singh Shekhawat (2020H1430058P)*
Company: Total Environment
Profile: Structural Engineer

Recruitment Procedure
- Recruitment Procedure – Offline test, Interview
- Test had 2 sections:
  - Technical: Code provisions, Comprehensive and Multiple choice questions
  - General and Analytical: - English and aptitude, includes MCQs, fill in the blanks and match making
- Test was of standard difficulty; concept clarity was necessary to solve it.
- Interview questions include:
  - Tell us about yourself
  - Technical questions regarding the design of structures
  - Explanation of your answers in the technical test - they were interested in the thought process of the individual rather than correct answer
  - Future 1 – year plan in the company if got selected
- Clarity of mind, approach towards the problem and positive attitude was given consideration.

Sources of Preparation
Reinforced Concrete Structures designs and analysis, Earthquake Engineering and designs for its effect should be prepared well. IS codes are important for this along with standard reference books.

Courses and Certification
Structural Analysis, Concrete Structures and Earthquake Engineering could prove useful

Other Relevant Information
It is important to prepare according to the job profile, Projects undertaken during the course can come in handy.

Domain:

CONSULTING

Sector: Consultancy/ Analytics.

Name: *Rangoli Jain (2020H1290022P)*
Company: Evalueserve
Profile: Research associate (IPR)

Recruitment Procedure

- Online test, technical round, HR round
- Online test was a common aptitude test. The course is basic but the point is time management; you have to solve 60 questions in 60 min and they won't be solved in a minute. It had 3 sections:
    - English: Had questions from grammar, reading comprehension etc.
    - Mathematical: Questions from time and work, relative speed, data interpretation, numerical reasoning etc.
    - Logical Reasoning: Questions from pattern matching, sentence interpretation, blood relations etc.
- Technical round was conducted in 2 phases (let's say TR1 & TR2). TR1 (Telephonic) was all about actual knowledge of the course. You need to be prepared to answer any questions from every skill/experience in your resume. Focus on lab experiments and the principle behind them.
- Bioinformatics is very important; they asked about databases, BLAST, Matrices used in BLAST/global/local alignment, sequence formats etc. The job requires extensive use of MS-Excel so expect questions from that.
- TR2 (video call) was with a senior in the company. They will try to judge how you approach a problem, recent developments/ discoveries in the field. They may or may not ask technical questions but be ready.

Sources of Preparation

- Course books; pay special attention to the fundamentals of every technique performed in the lab.
- News articles on recent inventions and developments in the field like science daily, nature articles, the scientist etc.
- Brush up on excel, especially the functions and data interpretation tools.
- Bioinformatics; databases and how they operate.

Courses and Certification

None as such. Be ready to answer questions from your previous internships and current project(s) you are doing.

Sector: Consultancy/Clinical Research Organization

Name: *Diksha Mishra (2020H1530362P)*
Company: IQVIA
Profile: Digital Consulting Intern

Recruitment Procedure
- Resume Shortlisting and Interview
- Interview took place for 30 min:
    - First, he asked me to briefly introduce myself. Then he went through my resume simultaneously which I had shared prior with the company.
    - As the job role was about primary and secondary research so I explained my masters work in relevance to that.
    - Also, they try to understand why you want to get into their company only and what makes you special to be hired.

Sources of Preparation
- Have some background about the Company (internet search)
- Try to do MS office certificate courses which would help in resume shortlisting and interview
- Should be through with Clinical Research Subject
- Prepare a script about yourself and your works and achievements so far. Try to make it according to the job profile mentioned.
- Show the developed skills which can be suitable for the profile mentioned.

Courses and Certification
- Excel skills for business essentials- Macquarie University (Coursera)
- LinkedIn Skill Assessment Badges
- SQL certification on LinkedIn

Other Relevant Information

In addition, as this is a non-core sector, they will try to know the reason you want to leave core and join them. Also, why only IQVIA is your choice and not others. Also mentioning what other opportunities you see in their company will make your chances stronger for selection.

Sector: Consulting

Name: *Shete Dhanashri Dhananjay (2020H1460359P)*
Company: IQVIA
Profile: Digital Consulting Intern

Recruitment Procedure
- Resume Shortlisting, HR
- Questions asked in interview:
  - Tell me about yourself
  - One case study regarding different routes of administration
  - Follow up questions from what you answer
  - Where do you see yourself in the next five years?
  - What do you know about your job profile?
  - Do you have any questions?
  - Why are you interested in non-core?

Sources of Preparation
Search for a case study based on the questions which were asked in the previous year. You just have to be very particular while answering the questions. Just brush up the basic knowledge.

Other Relevant Information
- It is completely based on your basic skills and the things which you studied in your course.
- You only need to be able to convince the recruiter why you are interested in joining the company and which skills of yours will help in the company's growth.
- You also need to prove that you will be loyal to the company and you are very happy while doing a non-core job.

Sector: Consultancy

Name: *Soikot Banerjee (2020H1410152P)*
Company: Markets & Markets
Profile: Research Analyst

Recruitment Procedure
- Video CV & HR Screening
- Hiring Manager Screening
- Final Round with Chief Research Officer

Sources of Preparation
Study materials on Market Sizing, Market attractive analysis and Market entry strategy.

Sector: Consultancy

Name: *Pranav Krishnan Iyer (2018A4PS1113P)*
Company: Searce
Profile: Business Process Analyst

Recruitment Procedure
- Online test, Resume Shortlisting, Technical Interviews, HR Round
- The one-hour-long test consists of three sections: Analytical, Quantitative and Logical
- The now filtered set of candidates will have to go through a few rounds of interviews. The types of questions are as follows:
  - "Walk us through your resume/your highlights over the past few years."
  - Some short case-related questions, wherein a basic structure as a solution is required, not necessarily a definitive answer.
  - Some logic problems.
  - May ask some basic disciplinary-specific questions.
  - In the HR Round, the interviewer is usually assessing how well the individual understands himself. One should maintain a balance between humility and confidence while answering these questions.
- The structure of the solutions/arguments is what they are looking for. Always use the time they give to come up with a thorough solution, which looks at all angles.

Sources of Preparation
- For the online test, foundational math skills are required; an understanding of probability, permutations and combinations, etc.
- With respect to the interviews, look at a few example case interviews on YouTube. They'll give a good idea of the kind of approach that is required. Be prepared to answer questions about yourself/resume.

Sector: Consultancy & Analytics.

Name: *Sisir Sanagala (2018A4PS1115P)*
Company: Searce Inc**.**
Profile: Business Process Analyst

Recruitment Procedure

- The overall process involved: Aptitude test, Resume shortlisting, 2 Personal Interviews, HR round
- The aptitude test had 3 sections:
    - Logical Reasoning: This section had questions on permutations and combinations, probability and other quantitative aptitude questions
    - Data interpretation: Analyzing pie charts and bar graphs
    - Math: Very basic questions on geometry and trigonometry
- The test was fairly simple, and had no negative marking. However, it is important to maintain speed to complete all questions on time
- PI 1: Resume based questions on relevant subjects, internships and PORs were asked to begin with, followed by questions on what kind of role I was looking for and why. (~ 20 mins)
- PI 2: This round was designed to check problem solving skills and general analytical thinking. Questions on guesstimates and a few case problems were asked. Use a very methodical process to solve the problems. The final answer is not as important as the logical approach taken to solve the problem. (~35 to 40 mins)
- HR Interview: Typical HR questions based on strengths and weaknesses, challenges I have faced in the past, etc. (~ 15 mins)

Sources of Preparation

Case in point is useful for understanding some basic guesstimates and case problems. Solving math and logical based puzzles from any online source will be useful

Courses and Certification

No courses as such. However, knowledge of basic finance concepts and data analytics will be helpful. Knowledge of Excel, Google docs and PowerPoint will also boost your application

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Other Relevant Information

- It is important to be extremely thorough with your resume. Being able to present yourself well and being confident is key.
- You should be able to justify why your profile is in line with what they expect. It will be helpful if you can relate why your on-campus experience and PORs are relevant to the job.
- Towards the end of the interview, the interviewer will typically ask if you have any questions, be sure to ask questions to find out more about the role and the company. This way you learn more about the company and make a good impression on the interviewer.

Sector: Consultancy

Name: *Yashodanandan Nayak (2018A1PS0506P)*
Company: Searce
Profile: Business Process Analyst

Recruitment Procedure
- Online Test, Resume shortlisting, Interview
- Online test:
  - Only aptitude based test. No technical questions
  - Duration- 1 hour , Total marks= 45 (should obtain at least 60% of total to be considered for resume shortlisting)
  - Test was easy. However, it is important to maintain speed and accuracy to finish all questions.
- Interview consisted of 3 rounds.
  - In the first round they asked general questions like why did you apply for the role , what do you think will be your type of work in the company etc.
  - Second was a technical round where they asked particularly about projects mentioned in the resume.
  - Third was the final HR round where they asked one logical question and other typical questions like where do you see yourself in 5 years, whether you would be open to other roles in the company etc.

Sources of Preparation
The PU training tests are enough to get through the round.

Other Relevant Information
- Go through your job description properly. Attending PPT is a must and from there you can pick some relevant information which you can relate during interview rounds.
- Be thorough with your projects and if possible relate it to the project which the company has undertaken in the past. You can gather information from the company website.
- You need to be able to convince the recruiter why you wish to join that particular organization and how your skills fit into the profile you are being recruited for.

Sector: Consultancy

Name: *Ishbah Hilal (2020H1290018P)*
Company: Syneos Health
Profile: Analyst

Recruitment Procedure
- Resume Shortlisting - Yes
- Aptitude test - No
- Interview rounds - The initial communication was for 3 but they took only 2 rounds before final results.
- Round 1:
    - Students were split into various panels and each panel had 2-3 interviewers which were a mix of India-based leadership and US-based leadership.
    - Questions asked in this round were very typical interview questions such as strengths and weaknesses, hurdles, and learnings.
    - What is a wrong perception people have of you?
    - What is a leadership experience and what have you learned from it? How to manage conflict and get people to contribute in a group setting?
    - Very conversational.
    - 2 candidates from each panel went to the next round
    - My suggestion for the Round 1 situation would be to lead the conversation while introducing yourself and answer the questions more so that it forms a loose story as that gives a more cohesive view of you to the panel and they get to know more about you than just answering each question as an individual.
- Round 2 :
    - The panels were switched and the round was a Case Study round where a guesstimate was to be solved
    - I used a population count of 100 and gave my results as a percentage. The panel worked it through with me while I was answering the question and then asked about/shared more possibilities that could be added as factors and how they would affect the situation.

Sources of Preparation

For Case studies - Practice guesstimates related to your company's core field and do that verbally so that the habit of showing them the logic forms. A best practice is to use close to real population figures however if that is too complex at the moment working with a population size of 100 also works. Try to include as many segmentations and factors as you can consider.

Domain:

ET

Sector: ET

Name: *Piyush Raj Jha (2018A3PS0320P)*
Company: Espressif Systems
Profile: Associate ASIC Engineer

Recruitment Procedure

- There were 3 stages in the recruitment process:
  - Written Exam
  - Technical Interview
  - HR Interview
- Written Exam - The topics covered in the exam were:
  - General aptitude
  - Digital Design
  - Verilog programming
  - C programming basics
  - Python programming basics
  - Operating Systems (cache hit and miss)
- There were 3 rounds of technical interviews. Each round covered different fields of electronics.
- Round 1: The first round was related to C programming and Verilog programming. Some of the questions asked were –
  - How would you find the power of 2? Write a function for it.
  - How would you check if a number is a power of 2?
  - These are the types of questions asked. The interviewer asked me to improve on a very basic code for finding the power of 2. He hinted to me to use bitwise operators as these are some important operators that you should have a thorough understanding of. The interviewer looks for strong fundamentals in these areas.
- For Verilog programming he asked me to make a shift register and asked what kind of circuit is represented by the program written.
- Round 2: This round focused on the mistakes that were made in the test as well as your thought process for approaching these questions. Along with this, questions on digital design were asked.
- Round 3: This was a mix of personal and technical interview. This happened with the director of the ASIC design team. He asked thought pondering questions which were slightly tricky and required strong fundamentals in digital design. An example question would be how could you use a 2:1 mux as a atch.

- HR Round:
  - In this round the HR asked questions such as – why do you want to join espressif, why would you be a good fit for the company, etc.
  - She also asked if I would be fine with relocating to Pune. She was checking if I was flexible to relocate to a different location.
  - Then she briefed me about the job and answered all the doubts I had related to the company, the work environment and growth opportunities.

Sources of Preparation

- Slides from Computer Architecture, Operating Systems.
- Morris Mano book for Digital Design.
- GeeksforGeeks and other similar sources to strengthen C programming knowledge.

Courses and Certification

Computer Architecture and OS are some recommended disciplinary electives. DSP was an added bonus.

Other Relevant Information

- Staying calm and composed is a plus so even if you're not able to answer a particular question show you knowledge around the topic while maintaining your cool.
- It is important to have crystal clear concepts in Digital Electronics, Computer Architecture and C Programming as most of the questions test your fundamentals.

Sector: ET

Name: *Abhisekh Kumar Gaurav (2020H1400185P)*
Company: Mediatek
Profile: VLSI Physical Design Engineer and STA

Recruitment Procedure
- Written test: Test has 3 sections. Each section has individual timing.
  - Section 1: Aptitude and Reasoning
  - Section 2: Verilog HDL Output Questions
  - Section3: Basics of Digital Electronics and Analog Electronics
- Test was easy. But it had 55 questions to be completed in 65 minutes. So speed is a very important factor
- Interview:
  - Introduce yourself.
  - Basic questions from CAD/Vlsi Physical Design.
  - Explain the Vlsi Design Flow. Be thorough with the basics of each step of the design flow.
  - Clock Tree Synthesis.
  - Signal integrity issues.
  - Clock Domain Crossing.
  - STA (Most Important)
  - Basic questions from verilog.
    - Difference between reg and wire, blocking and non-blocking statements, initial and always statements.
    - Write a verilog code for full adder by instantiating a half adder.
    - Verilog code for D-Latch.
    - Note: You should be good in Verilog basics for Vlsi profile.
  - Basic questions from Digital Design
    - Difference between latch and flip-flop, synchronous and asynchronous circuits.
    - Basics of various flip-flops.
    - FSM (Most Important)
    - Basics of Vlsi Design:
    - Basics of MOS and CMOS.
    - Memories

Sources of Preparation

- Digital Electronics from NESO ACADEMY (Youtube)
- Verilog HDL from Samir Palnitkar.
- For Vlsi Design and CAD- Class notes are sufficient. You can also watch NPTEL videos.

Other Relevant Information

- Only prepare the basics of the required subjects. Be thorough with your projects which you have mentioned in the resume.
- For Vlsi profile, Verilog Hdl, Digital Electronics, CAD and Vlsi Design is very important. Be confident. Hard work always pays off and ALL THE BEST

Sector: ET

Name: *Amrith Aathmaram (2020H1240104P)*
Company: MediaTek India Technology - Bangalore
Profile: Communication

Recruitment Procedure
- Online test, 2 rounds of Technical interview
- The **online test** had the following sections:
  - **General Aptitude**: These questions were lengthy for the time given for the section.
  - **C based questions**: Basic questions like output of pseudo-code, error in codes.
  - **Communication questions**: Basic questions based on the syllabus covered in the semesters.
- **Coding round**:
  - 3 coding questions which were easy to moderate level, had to be attempted in C language only.
  - The test was easy to moderate overall, with no negative marking. Each section had its own timer and there was flexibility to move across the various sections of the test.
  - However, each section can be attempted for the allotted time only.
- For **Round 1 interview**, the following questions were asked:
  - Introduction to projects and courses
  - Questions on communication concepts such as OFDM, starting from block diagram, why we need source coding and channel coding
  - Function pointer definition, logic for linked list and sorting algorithms
- For **Round 2 interview**, questions revolved around the concepts that were used in projects and also programming concepts similar to the ones in round 1.

Sources of Preparation
- Lecture notes of ADC, MPC
- Programming questions from Geeksforgeeks, Hackerrank
- Aptitude and puzzles from various websites, sharetechnote.com.
- For wireless concepts, refer to Prof. Aditya Jagannathan sir's video lectures playlist on YouTube.

Courses and Certification

Advanced Digital Communication, Mobile Personal Communication, RF Microelectronics, Advanced Digital Signal Processing

Other Relevant Information

- Be thorough with the concepts used in the projects and present them in a confident and organized manner, as it can play a major role in the interview process.
- Do share your thinking process out loud while solving any problem during the interview.

Sector: ET

Name: *Sahil Bhadwal (2020H1400175P)*
Company: MediaTek
Profile: Physical Design and STA

Recruitment Procedure
- Online Test, Technical Interviews.
- Online Test had multiple sections and had sectional cutoffs.
  - Aptitude section contained lengthy questions and almost all questions were moderately difficult.
  - Rest test contained basic digital, CMOS VLSI, STA & verilog based questions.
- Interviews were conducted in two rounds.
- Round 1:
  - After a brief introduction, the interviewer gave me a problem statement and told me to code it in Verilog then asked me about the working of the code and what components will be synthesized for the same. Then he told me to make some changes in the code and asked questions based on that.
  - He then asked me further basic Verilog concepts like the difference between blocking and non-blocking assignments.
  - He showed me a few code snippets containing blocking and non-blocking assignments and then asked me about the number of synthesized registers.
  - Next phase of questions was related to the STA. He showed me some circuits and told me to write the setup time and hold time equations and asked me the ways to rectify the setup and hold time violations.
  - At the end of the interview, he asked me to explain ASIC design flow and asked some questions related to the design flow. This round lasted for approximately 1 hr.
- Round 2:
  - Round 2 happened immediately after the 1st Round. This round of interviews was entirely focused on digital design. He asked me to draw some logics using 2:1 Mux and then code those logics in Verilog by instantiating modules inside a top module.
  - At the end he asked me a Puzzle, link for which I am providing below: Puzzle 9 | (Find the fastest 3 horses) - GeeksforGeeks
  - This round lasted for 45 minutes.

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Sources of Preparation

- For Verilog one can learn the basics from the book "Design through Verilog HDL by Padmanabhan".
- For practice one can go to the website: http://hdlbits.01xz.net/wiki/Main_Page and solve the problems.
- For STA one can follow the material of http://www.vlsi-expert.com/ and can also watch the clock design lectures of "VLSI PHYSICAL DESIGN" by Prof. Indranil Sengupta lecture series.

Other Relevant Information

Verilog concepts must be strong; you should be able to code a given problem. Also the synthesis aspects of Verilog must also be clear. One can watch the video lecture series of "Hardware Modelling Using Verilog" also by Prof. Indranil Sengupta.

Sector: ET

Name: *Saurabh Anil Pandhey (2020H1240107P)*
Company: MediaTek India Technology
Profile: MSP5 (Modem Software Processing) Engineer

Recruitment Procedure
- Online Test:
  - It consisted of 4 sections (No Negative Marking). You can switch from one section to another at any time during the test but as soon as you enter a new section, a new timer will start.
  - Suppose Section 1 had 10 questions to be solved in 10 minutes, you solved all 10 questions in 6 minutes and switched to section 2 then a new timer would start and you would not be able to use the remaining 4 minutes of previous section (i.e. section 1) in subsequent sections. So, even if you are switching between the sections to navigate through the questions, keep track of time left for each section.
  - Aptitude (8 Questions-10 Minutes): Moderate questions on time and work, data interpretation, puzzles. Some questions needed some time for calculations hence once you enter this section, take 30-45 seconds to just go through all the questions so that you can decide which questions to attempt first.
  - Communication (16 Questions- 20 Minutes): All basic questions on modulation schemes, OFDM, diversity, fading etc. This section is comparatively easy. Try to attempt them all.
  - C language coding (3 Questions- 40 Minutes): Moderate coding questions on pointers, arrays and data structures mainly. In each of the questions, you have some test cases to be passed. Try to submit the code even if it does not pass certain test cases. You will get some points based on the test cases passed.
- Written test:
  - As per the instructions of the written test, there was an option to choose between general engineering section and programming basics section. Wisely choose the section you want to attempt.
  - General engineering section (16 Questions- 20 Minutes): Easy to moderate level questions on network theory, digital circuits, microprocessors, MOSFET basics and analog circuits.
  - Programming basics (16 Questions -20 Minutes): Easy to moderate level

questions on error and output finding, different types of sorting and time complexity basics.

- Technical Interview:
  - Around an hour long discussion on communication concepts and C programming.
  - It started with a basic introduction. The interviewer will ask about your comfort level in communication concepts.
  - Then around 30-minute discussion on OFDM- How orthogonality is achieved, importance of cyclic prefix, what actually happens when you add cyclic prefix, why IFFT block, expression of IFFT, draw and simultaneously explain each block in the block diagram of OFDM, what is need of interleavers, some basic questions on channel estimation.
  - Next 10-15 minute discussion was focussed on fading and diversity- what is fading, what is slow and fast fading, how to overcome fading, what are different diversity techniques, what is MIMO, questions on Doppler shift and coherence time, coherence bandwidth. The interviewer also asked to explain the concept of shadowing.
  - Then interviewer will ask about your comfort level in C. Next 10-minute discussion was on basic concepts in C. The questions asked were- explain the concept of pointers, what is difference between normal variable and pointer variable, what is difference between static and global variables, how will you set particular bit positions in 8-bit number, how to reset bit positions.
  - Last 5-minute discussion was on my hobbies and questions related to it.
  - At the end, the interviewer will ask you whether you have any questions for him, grab this opportunity and ask about job description in detail and any feedback he would like to give so that you can improve yourself further.

Sources of Preparation

- Aptitude: IndiaBIX and other online resources.
- Communication: Mobile and Personal communication(MPC) and Advanced Digital Communication(ADC) class notes, Lectures on MIMO, OFDM and
- CDMA by Prof. Aditya Jagannatham IITK, Rappaport book.
- General Engineering: GATE notes for digital electronics and analog circuits. Basic MOSFET concepts from Kang/Rabaey book.
- C Programming: GeeksforGeeks, C by Naresh I Technologies (Youtube Channel), data structures by mycodeschool(Youtube channel). Additionally, I followed data

structures and algorithms bootcamp by FACEprep made available by Placement Unit.

Courses and Certification
- Mobile and Personal communication.
- Advanced Digital Communication.

Other Relevant Information
- As mentioned above, the main focus is on core communication concepts so brush up all your basics. Be calm and confident while answering. Even if you are stuck at something, the interviewer will surely try to help you by giving some hints.
- One more important point to note is to discuss with your seniors regarding which topics to focus on before the placement season starts as they are the best people to guide you in those respects.

Sector: ET

Name: *Shivam Singh (2020H1230229P)*
Company: Mediatek
Profile: Physical design and STA

Recruitment Procedure
- Online Test, Technical interview
- Test had 3 sections:
    - Aptitude Section - 8 Questions in 10 minutes, questions were difficult
    - Engineering Section - 20 questions of Basic level which was mix of Vlsi, Analog design, RISC processor related questions
    - Digital Design - 27 questions of moderate level (for example divide by 3 counter, divide by 1.5 counter, negative edge detector)
- Technical Interview:
    - Tell us about yourself
    - He asked me about mentioned projects in my resume, then asked questions related to my research project which was based on logical effort optimisation
    - After projects I was asked to define complete Asic flow , then he told me to design xnor gate using 2*1 mux , after that many questions were asked related to Clock Tree Synthesis (CTS is very important)
    - In last he asked me what is setup ,hold time , their violation and then methods of correction
    - Be confident and loud in your interview.

Sources of Preparation
- Vlsi Architecture – Class lecture slides
- Vlsi design – Rabaey (more than sufficient)
- Cad for IC design – Nptel lectures of Indraneel Sen Gupta
- Verilog – Indraneel sir's first 25 lectures of hardware modelling using Verilog
- STA – Vlsi universe and Vlsi expert

Courses and Certification

No certification is needed, just follow BITS Pilani course structure.

Other Relevant Information

Knowledge of some scripting language like Python or Perl will give you some edge in an interview.

Sector: ET

Name: *Swati Purna Sahoo (2020H1400177P)*
Company: MediaTek
Profile: Physical Design and STA

Recruitment Procedure
- There were three stages in the overall recruitment process: Written Examination and Technical Interview
- Written Examination - The topics covered in the written examination were:
  - General Aptitude
  - Digital Design (Flip Flops, Counters, Synchronous and Asynchronous circuit design, FSM,Combinational logic – Realization of functions using MUXES, Decoders, Encoders, Number Systems, etc). Better prepare questions from the DigiQ question bank.
  - Basic Engineering Section: Like Network theory basics, Ohm's law.
  - STA based numerical
- Technical Interview:
  - Introduction – Give a brief introduction about yourself, where do you come from? What is your educational background? What are your interests (Technical Only)?
  - Difference between wire and register.
  - Difference between procedural and continuous assignment.
  - Can we use wire type in case procedural assignment and reg type in case of continuous assignment.
  - Asked me to write a verilog code for AND gate, then D-FF. Then he changed the question that the input to D-FF is "and" of two different inputs.
  - Then he gave me a few digital circuits and asked me the output waveforms, functionality of the given circuit, output transitions and other such types of questions.
  - One question he asked from the written test based on a Moore based machine and asked me what this machine is trying to detect. There was a typing error in the question so I pointed out that error, he was pleased with that.
  - So during the interview process you have to be very calm and before giving an answer first think about it and what you should say so that the interviewer will be pleased.

Sources of Preparation
- Digital Design - Practice from DigiQ Question Bank. Refer to Gate preparation notes for theory.
- STA - Solve questions that are present in DigiQ question bank. See the Udemy course on Static Timing Analysis by Kunal Ghosh. Also solve the questions that are given in the vlsiexpert.com site. YouTube videos by vlsiexpert.com. Also interview questions provide by a YouTube channel ''TechnicalBytes''
- Physical Design Flow - See the RTL to GDSII flow videos by vlsiexpert.com
- VLSI Architecture (RISC preferably) – Classroom recordings by Prof. Gurunarayanan.
- VLSI Design - Digital Integrated Circuits by Jan M Rabaey.
- Aptitude - I did a course on aptitude in Udemy because for aptitude you need to know the short tricks because time and accuracy is very important in written tests.
- Verilog - Just go through verilog interview questions that are available on the internet, questions available in asicworld.com.

Courses and Certification
VLSI architecture, VLSI design, Workshop on Physical Design using OpenLane/Skywater130 by vsdiat.com

Other Relevant Information
- During the interview process the interviewer wants to know your analytical skills not the theoretical mugged up knowledge so during the process fight for each and every question. They want to see your approach and also to reach the correct answer.
- Also from my previous interview experience in other companies focus on RC circuits also. They usually ask questions like for a given RC circuit with this input pulse draw its output pulse.
- Be calm during the process, ask the interviewer for a minute to think about the question and then answer.

Sector: ET

Name: *Vishnu Vardhan (2020H1240110P)*
Company: MediaTek
Profile: Communication

Recruitment Procedure
- Written Test and Technical Interview
- Written Test had 5 sections
  - Coding Section- C/C++ Programming for three questions.
  - Aptitude – 8 questions in 10 minutes.
  - General Engineering related to Digital Electronics and Analog Electronics.
  - C programming MCQs.
  - Technical questions related to Communication.
  - Between Section-c and Section-d, one section is optional (Attempting any one of the sections is sufficient).
- Test was Moderate and Aptitude was tough.
- Interview Questions:
  - Tell us about yourself and subjects that you have done in your course.
  - Questions related to Communication block diagram, OFDM and other questions related to Wireless communication.
  - Coding question related to arrays concept

Sources of Preparation
For technical knowledge, in depth knowledge of subjects that are covered in semesters are sufficient. For coding, video lectures by Naresh IT and other websites for revision.

Courses and Certification
Interviewers didn't ask for certifications but I have certification related to C.

Other Relevant Information
For any Company Along with C, learning data structures is also very important and Coding questions will also be asked in the written test and Interview process.

Sector: ET.

Name: *Ambedpelliwar Sankalp (2018A3PS0383P)*
Company: Micron Technology
Profile: ASIC Design Verification Engineer

Recruitment Procedure

- Online Test, Technical Interview(s), HR(Manager) Interview.
- Online test consisted of three sections:
  - Aptitude Section: 15MCQs, 20mins. This section was relatively easy. Practice from PU portal and a few GATE Aptitude questions is sufficient to get a good score in this section.
  - Programming Section: 15MCQs, 20mins. Questions from C, C++ and Python were asked. The difficulty ranged from moderate to lengthy. Snippets were given and the correct option was to be chosen. I would say difficulty was moderate since programming is not my forte.
  - Technical Section: 25MCQs, 35mins. This section was easy. Basics of DD, ADVD, ES and OpAmp (AnE) would be more than sufficient. Surprisingly, there were no questions from STA. There were some Verilog questions also. Most of these questions were easy.
- Technical Interview: The Interview was on Zoom call. It was a one-on-one interview.
  - I was asked to give a brief introduction about myself.
  - Then the Interview started off with a few basic questions from C Programming and VerilogHDL. I wasn't asked many questions from DD and ADVD in the Interview.
  - The interviewer asked me a few questions from my projects, particularly the Computer Architecture project. Based on my explanation, further questions and modifications to the architecture were asked.
  - I was also asked about my internships. I was then asked about my Interests in the technical side.
  - This round lasted for around 50 mins.
- HR (Manager) Interview:
  - Some generic questions on strengths, weaknesses and "where do you see yourself in five years?" were asked.
  - I was also asked about my POR.
  - I have done an equal number of courses/projects in Analog domain also. So, I was asked to justify why I wanted to work in the digital domain.

- This round lasted for 45 mins.

Sources of Preparation
- Morris Mano, DD notes are the best way to prepare for DD.
- Kang, Notes for ADVD
- Computer Architecture Notes and Slides are sufficient.
- Samir Palnitkar is one the best books for VerilogHDL. Beginners can also easily understand concepts written in this book.

Courses and Certification
ES, DD, MuE, ADVD, Comp Arch, AnE.

Other Relevant Information
Resume preparation is extremely important. PU will help you in Resume prep. Computer Architecture is not compulsory, but very important.

Sector: ET

Name: *Avadh Harkishanka (2018A3PS0322P)*
Company: Micron Technology
Profile: DEG (Memory Circuit Design Verification Engineer)

Recruitment Procedure

- There were rounds in the process: test, technical interview (number of rounds depending on profile) and HR interview.
- Test:
  - It had three sections: Aptitude, Programming, and Electronics.
  - Aptitude had simple questions which had to be answered in a limited time, speed and accuracy are required.
  - Programming section included questions on C, CPP, Python numpy and pandas and some basic programming algorithms.
  - The profiles of CAD and Firmware had some programming requirements. The third section included basic questions from DD, ED, ADVD, some advanced Verilog concepts and basic questions from MuP.
  - This round had very basic questions covering a vast range of topics. Test was easy but maintaining proper speed is required.
- There were two technical rounds.
- The first technical round had questions from the projects in resume, Verilog Programming, different Digital design circuits, drawing state diagrams, implementation of circuits using shift registers, basics of CMOS inverter, impact on CMOS circuit if the PMOS and NMOS are switched, Computer Architecture concepts and the hazards in pipeline implementation.
- The second round had questions from STA, CMOS implementation of circuits, logic design of circuits using gates, DISCUSSION on DRAM cell and its read/write operations, Passive high pass and low pass filters and the transient response of the high frequency and low frequency pulses.
- The second technical round was joined by the senior manager who further conducted the HR round with questions like introduce yourself, Describe yourself in one line, Where do you see yourself in five years, do you like the profile, what do you know about micron, Why are you not going for a MS, What do you do in the free time.

Sources of Preparation

- Digital Design – Morris Mano, Lecture Slides, Youtube videos – Neso Academy, Practice GATE questions Computer Architecture – Class notes and lecture slides, go through the project on RISC processor design
- ADVD – Class notes, Kang - CMOS inverter and dynamic gates, Rabaey - Combinational gates
- SRAM and DRAM Cells - Sedra Smith
- STA – ADVD basics and questions from vlsi-expert
- Electrical Science RC circuits – Foundations of Electrical Engineering – Bobrow, NPTEL lectures
- C programming – Lecture slides, Geeks for Geeks.
- MuP – Video Lectures from BITS Goa
- Analog Electronics – LK Maheshwari and class notes
- ADVD Layout design – Class notes, go through the MOSFET parasitic capacitances
- MuE basics – Class notes and lecture slides

Courses and Certification

Computer Architecture and EEE CDCs.

Other Relevant Information

The overall process requires strong basics of the subjects, the interviewer gives hints if you miss out on something, try to explain the thought process during the interview, concentrate on the basics for the interview and practice GATE questions for test preparation. All the best!

Sector: ET

Name: *B V S Sai Kiran (2020H1230233P)*
Company: Micron
Profile: ASIC Verification Engineer.

Recruitment Procedure
- Online Test, Technical Round, Managerial Round
- Test had 3 sections:
  - Aptitude and logical reasoning
  - Basic Programming
  - Technical – Mostly covering digital
  - Test was Medium, a good idea on GATE level problems would be sufficient.
- Technical Round:
  - Tell us about yourself
  - Started with a few Questions on Memories – SRAM, DRAM, data accessing (read and write).
  - Later went to digital electronics, covering all topics slightly (Combinational circuits, Sequential Circuits, Mealy-Moore circuits, STA and STA related violations).
  - Ended the interview with the discussion on my projects.
- Managerial Round:
  - Manager was more interested in knowing my thinking and mindset. All the regular managerial questions popped up one after another.
  - Why Micron?
  - What are your Expectations from Company/team.?
  - Where do you like to see yourself in 3years and 5years?
  - Areas of Interest and subject you have studied during the course work.
  - Asked about my work experience and various roles and responsibilities I have handled in my previous company.

Sources of Preparation
- Aptitude – practice different types of problems from IndiaBix or R S Agarwal.
- Practice gate previous years Digital and Analog questions
- A good revision of Morris Mano for Digital concepts is important.

- Textbooks Rabey and neil-weste will give you a wholesome understanding of Digital design.
- Prepare Static Timing Analysis from VLSI Experts site.
- Solve questions from Digi-Q Material.
- Have a thorough understanding of all the projects you have mentioned in your resume.
- Deep understanding of Verilog is a must. All basic Verilog codes must be practiced. Types of modelling and design styles should be known. NPTEL videos by Indraneel sen Gupta and text books by Samir palnitkar will be useful.
- Be prepared in basic digital logic design questions and the Verilog implementation of simple digital blocks such as RAM, Counters with Load/Reset, FSM. Solve some tricky and puzzle type digital design questions available on the net.

Courses and Certification
Not Required. But any relevant certifications will be an added advantage.

Other Relevant Information
Be confident with your problem solving approach. Most of the interviewers will be nice and helpful, so there is no reason to be stressed on your big day. Be cool headed and speak your approach/thinking loud.

Sector: ET

Name: *Gokul Karthiik M (2018A3PS0441P)*
Company: Micron Technology
Profile: CAD Engineer

Recruitment Procedure

- Written Test + Coding Test + 2 Technical Interview + HR
- Written Test:
  - The first stage was an online written test consisting of aptitude, electronics, and programming.
  - The aptitude questions were easy.
  - The questions were internally labeled as Memory /Analog /Verilog /Digital /RTL for the electronics part. The format of the test was something new, as I didn't expect memory based questions. It was due to the addition of a new job profile.
  - No negative marks, but don't guess the answers as they might be asked in the interviews.
  - For the coding part, there were C/Python-based output questions in general. In my case, I did not know Python, so basic C programming is sufficient, but knowledge of Python will be preferred. There were some 16 shortlists for the CAD profile.
- Coding Test:
  - For the role of CAD engineer, a coding test was conducted, in which we were asked to solve two questions out of 5 (time duration: 1 hour). The preferred languages were CPP and Python.
  - Two out of the five questions were based on arrays. Three out of those five questions required knowledge of DSA.
- Technical interview 1:
  - Technical Interview -1 consisted of electronics and coding-based questions. I was asked about the project that I had done in PS-1 and ADVD (mentioned in my resume).
  - After that, I was asked to draw a CMOS inverter and draw the VTC. Then, I was asked some ways to reduce short circuit power consumption with some follow-up questions.
  - Surprisingly, I was not asked about STA, but it is essential to learn STA. In the coding part of the interview, I was asked about stack, queue, linked lists, and some basic pointer questions.

- Technical interview 2:
  - Technical Interview -2 consisted of electronics and coding-based questions. I was asked about my PS-1 project, and then I was suddenly asked OPAMP-based questions. So, expect some questions apart from digital electronics as well.
  - The interviewer tried to ask the meaning of every word I uttered, and I managed to explain to him. The coding part of the interview consisted of logic-based questions.
  - Then I was asked about something I learned online apart from the stuff related to the course work of BITS in general and was asked to explain that concept to them.
- HR Round: The HR round is pretty chill. It had some standard questions on Masters and stuff about yourself.

Sources of Preparation

- For DD and ADVD, class notes are sufficient. For STA, refer to 'vlsiuniverse.com', 'vlsiexpert.com' as it is not covered in depth in ADVD (for us). Electrical sciences should also be brushed for the online test round.
- DD – Class notes, Morris Mano.
- ADVD – Class notes, Kang, Rabae (Refer to Kang and Rabae only if you have time, else class notes are sufficient).
- Verilog – Samir Palnitkar, Lectures by Indraneil Sengpta on NPTEL.

Courses and Certification

DD, ADVD, Computer Programming, Electrical Sciences.

Sector: ET

Name: *Gummakonda Mahith Reddy (2020H1230252P)*
Company: Micron Technology.
Profile: CAD Engineer.

Recruitment Procedure

- First Stage was an online test consisting of 3 sections: Aptitude, Digital electronics and Programming:
  - The Aptitude section was focused on typical problems of Time and Work, Speed and Distance, Ages, Data Interpretation (4 to 5 questions) and a few logical reasoning questions.
  - Digital section had typical basics in combinational and sequential circuits, focusing on next state related problems in sequential circuits.
  - Programming section had questions on finding the output from C, C++, Python and quite a few questions on Verilog.
- For the CAD Engineer profile on the day of interview they conducted a programming test and asked the candidates to write two programs among five in C++ or Python.
- NOTE: There was NO NEGATIVE MARKING for Micron.
- Technical Rounds: There were 2 technical rounds. Each round had two interviewers, one from VLSI background and the other one from the Programming side. Both rounds were similar, most of the questions were on Digital Electronics and design Basics, STA, Verilog.
- Questions:
  - They start by asking for our intro in which we speak about our interests and projects we do in course work.
  - Half adder and Full adder difference, NAND gate implementation of them, Transmission gate-based implementation, Verilog code in gate level and behavioral modeling. The twist here was how Verilog synthesizes the same optimal design for both the codes.
  - Setup time and Hold time for both Flip Flop and Latch, and he asked to explain setup time and Hold time using the D latch internal circuit with transmission gates and inverters.
  - Some questions on frequency dividers and Flip flop conversions.
  - Questions regarding threshold voltage, second order effects of MosFet, and how to make a MOSFET with low Threshold voltage.
  - My resume had a project on SOC encounter for CAD for IC Design course,

so they asked me regarding SOC Encounter, LEF file, SDC (Design constraints) file, Abstract view and actual view which we get after doing SOC Encounter.

- ○ Programming section had typical questions like factorial of a number, finding if a given number is a power of 2, some kind of searching for a number in an array.
- ○ They asked some questions on how SOC Encounter software works and steps involved in it, how abstract view and exact view in it are compared. (Their main focus was on the approach we follow rather than the answer and for the programs they ask, if we know the logic it's fine, they really do not care about syntax)
- ○ Finally, there was a logical puzzle. He asked me how to collect 4 liters of water from a well provided with a 3 liters flask and a 5 liters flask.
- HR Round: It was a general interaction. HR made sure that I was clear about the profile and asked if location will be a problem and asked a few hypothetical HR Questions.

Sources of Preparation
- For Aptitude follow any source which you have already used in the past, just practice a few questions before the exam so that you can maintain a good pace in the exam.
- Just go-through the Digital Basics very thoroughly, prefer self-written gate notes if you have one, if not use Morris Mano. Study RC circuits from GATE syllabus.
- For VLSI basics if you have done the VLSI DESIGN course well it covers the entire thing, else study Kang for Inverter and MOSFET working, work out some VLSI GATE problems which have multiple MOSFETs in a circuit.
- For STA, go-through some videos on YouTube or follow VLSI experts and make sure that you understand all typical definitions like setup time, hold time, False path, Multi Cycle path etc. very well and try solving some questions which involve these concepts.

Other Relevant Information

- I have used the word 'Basics' many times and I really mean it. The interviewers test your basics across required domains; they believe that students with good basics can build upon them and learn things required for the company profile.
- In an interview do not give the answers directly. Try to explain your thought process to the interviewers. Never use terms which you are not clear about. They make questions from the words you speak, so speak the terms which you know well and make them ask questions you are good at.
- If you are not really good at programming and have time constraints, do not learn it new. Just tell them the logic well since you will be good at Verilog, logic won't be a problem.

Sector: ET

Name: *Het Shah*
Company: Micron Technology
Profile: Memory Design Engineer

Recruitment Procedure
- Min CGPA of 7 was the eligibility criteria to apply
- Online Test**:** It had 3 sections, 20 questions (all objective) in each section
    - Aptitude: Easy -->Practice is needed if you are out of touch.
    - Programming Basics: C and data structures questions were asked.
    - Digital Electronics: Topics from Morris Mano Digital Design Textbook till state machines, basic VLSI design concepts.This section's difficulty level was easy.
- Technical Round 1: Interviewer first asked me about myself, my interests and my projects. I was interested in the analog side so I was asked some analog questions then some digital electronics questions.
- Technical Round 2: It was more of a HR round in which I was asked about the overall interview experience. I was also asked some questions related to my projects. Also, my job profile and location were told.

Sources of Preparation
Revised BE topics like Electrical science, Digital Design, Microelectronics, VLSI design

Other Relevant Information
Be honest and confident and you can tell them frankly what are your interests even if the offered profile is not aligned with your interest. Honesty is a virtue which everyone likes.

Sector: ET

Name: *Kuram Anirudh (2020H1230238P)*
Company: Micron
Profile: CAD Engineer

Recruitment Procedure
- Written test, Coding test, two technical interviews and one HR interview.
- Written test had 3 sections:
    - Aptitude(Quant and Logical reasoning(mainly puzzle solving problems)
    - Programming section(Python and C++ objective type questions)
    - Digital electronics and VLSI design
- Coding test had 5 programs out of which 2 programs had to be written in one hour. Preferable language out of C++ or Python
- TR1 : Questions on VLSI design (mainly on MOSFET, Inverter etc.). Programming questions (asked to write a few basic codes), and two puzzle solving questions.
- TR2: Questions on VLSI design again (only a few questions on IC Fabrication steps). Programming basics again and two puzzle solving questions.
- HR round

Sources of Preparation
GATE notes for aptitude and digital electronics, Neso academy (Youtube channel) for C programming, Semester classroom notes for VLSI Design and other core subjects.

Courses and Certification
VLSI design and Cad for IC design will be helpful. Also a few C programming basics will be useful.

Other Relevant Information
Be clear about the profile in which you are being interviewed for and learn every related info about that profile. The interviewer will ask you why you are interested in a particular profile.

Sector: ET

Name: *Mohit Saini (2020H1230232P)*
Company: Micron
Profile: Memory Circuit Design Verification Engineer

Recruitment Procedure
- Online test, technical interview round 1, technical interview round 2 + HR round
- Online Test had 3 sections:
  - Basic aptitude (work time, profit loss, finding missing number, English paragraphs, basic quant)
  - Programming test (error finding in code, output finding from C,C++ code, python questions theoretical questions on OS)
  - Technical test (Microprocessor basics, base conversion of numbers, counters, basic questions on charge concentration, ADC, DAC)
- Online test was of moderate level and maintaining speed was mandatory, read the instructions carefully (negative marking)
- Interview questions:
  - Tell us about yourself
  - Follow up questions from what you answer
  - Low power design techniques (my project) and multi Vt technique for low power and tradeoffs.
  - Technical questions on VLSI design (inverter characteristics, frequency divider etc.) and the following questions were asked on keywords that I used to answer the ongoing question.
  - Static timing analysis (setup and hold violations and prevention techniques)
  - Moderate level problem to create a combinational circuit for given input and output
  - SRAM functioning (Read and Write), transient behaviour of inverter with NMOS and PMOS interchanged
  - HR interview questions were all personality based like introduction, hobbies, what do you expect from the company, future goals, further study plans etc.

Sources of Preparation
- Rabaey, S.Kang for VLSI design
- Palnitkar and Indranil Sengupta (NPTEL) for Verilog.
- Aptitude topics (R.S. Agarwal, Indiabix.com, Youtube channels

Courses and Certification

As such they don't ask for specific courses but VLSI oriented courses are mandatory according to the profile

Other Relevant Information

- Choose projects wisely to write into your resume (do not copy) and thorough knowledge of projects is mandatory, prepare VLSI design and physical design properly.
- Try to divert the interview towards your strong areas, convince the interviewer with your confidence, to the point answers, ask for time to solve (if needed), for online interview use digital writing pad (if available)

Sector: ET

Name: *Naman Kothari (2018A3PS0370P)*
Company: Micron Technology
Profile: ASIC Design Engineer

Recruitment Procedure

- Online Test had 3 sections:
    - Digital Section: This consisted of 25 questions with a time limit of 35 minutes. It had questions on basic concepts of Digital Design such as flip flops, Logic gates, Boolean algebra, sequential and combinational circuits and some questions on Verilog.
    - Aptitude section: It had 15 questions to be solved in 20 minutes. All the questions were easy, the only thing mattered was speed and accuracy. Practicing some of the Placement Unit aptitude material will be more than sufficient.
    - Programming section: It had 15 questions to be solved in 20 minutes. Questions were based on C, C++ and Python. Knowledge of the CP course was sufficient to solve C/C++ questions. I had no idea about Python syntax, so I just tried to guess those questions looking at the options. The test overall required speed and accuracy as the number of questions were many and time was less. There was no negative marking in any of the sections.
- **Interview:**
    - The interviewer first asked me to introduce myself. Then she started by asking some puzzle-based problems. I told her the approach to solve the question. Then she slightly tweaked the problem and asked me to approach the solution using the knowledge of Digital Design I have.
    - Questions based on synchronizers and FIFO applications, calculation of FIFO depth depending on the frequencies of two different systems, Processor design and its working, Static timing analysis were also asked.
    - Then she tested my Verilog skills by giving some puzzle-based problems, blocking and non-blocking statements, fork join/fork join_none/fork join_any were also asked.
    - My interview lasted for around 50 minutes. The interviewer was very nice and supportive and the whole interview went in a very friendly way.
    - If at some point you get stuck at some problem, the first thing is just don't get nervous, always explain your thought process to your interviewer even if it's some basic and obvious thing, so that they can give you hints

accordingly.
- ○ At the end I was given feedback about my interview, and she asked if I had any questions for her. Prepare at least two questions for this part.
- Manager Round**:**
  - ○ The interviewer asked about my internships and projects.
  - ○ Then he asked some basic digital design and Verilog questions like difference between Mealy & Moore machine and advantage and disadvantage of one over the other, types of state encoding and why a particular state encoding is used, difference between latch and flip flop, types of flip flops and which flip flop is used mostly in industries.
  - ○ He then asked me a bit about how verification is done for a design.
  - ○ Then he asked about my MS plans. The interview lasted for around 30 minutes. Then the interviewer concluded by asking me if I had any questions for him.

Sources of Preparation
- DD- Morris Mano and lecture slides are sufficient. For quick revision Neso Academy digital electronics section is pretty good.
- STA- Best source is VLSI expert website.
- ADVD- Rabaey, Kang and class notes/lecture slides.
- Verilog- If you haven't done Computer Architecture course then Samir Palnitkar is one of the best books from where you can start. Practice writing Verilog code parallely as you revise DD.
- Computer Architecture- Class notes and lecture slides.
- Previous years GATE papers on digital electronics.

Courses and Certification
Digital Design, ADVD, Computer Architecture, Verilog, Computer Programming, MuP

Other Relevant Information

- The company came for 4 different profiles, and therefore having a clarity of what the profile is about is important.
- Do some basic research about the company before appearing in the interview and try to relate your skills with the profile you are sitting for in the interview during your introduction part, as it might lead to a good first impression on the interviewer's mind.
- Don't start answering haphazardly as the interviewer asks his question. Organize the answer in your mind before speaking.
- While solving a question, speak-out your thought process and steps to the interviewer as he is more interested in your approach than your final answer.
- Be thorough with your projects and internships on your resume.

Sector: ET

Name: *Sahil Aggarwal (2020H1230257P)*
Company: Micron
Profile: Memory Design and Verification Engg.

Recruitment Procedure
- Round :
  - Written test which has 3 sections namely aptitude, technical and programming (C, python, some questions on basic Data structure).
  - Aptitude is easy to moderate, mainly covering topics of GATE and 1 seating arrangement question of 4 marks.
  - Technical part mainly consists of digital and Verilog questions and some questions of network theory and microprocessor.
- Interview:
  - Micron came for 3 profiles i.e. Memory design and verification engg, ASIC engg and CAD engg.
  - Luckily, I got an interview for memory and I have done my RP on SRAM so I prepared SRAM and DRAM in detail including cache.
  - Round 1- Started with basics of CMOS vtc , then setup hold time, Verilog code on MOD13 counter, basics of Verilog definitions, Sense amplifier in Sram, 6T bit cell.
  - Round 2- went on DRAM cell and SRAM cell and sense amplifier. In the last 15 mins we discussed projects done and other 20 mins some HR questions.

Sources of Preparation
- Rabey for VlSI design concept and timing analysis and memory.
- Indranil sir lectures for Verilog and physical design
- Blogs like vlsi expert, team vlsi , etc. are helpful for many topics.

Sector: ET

Name: *Saksham Soni (2020H1230253P)*
Company: Micron Technology
Profile: Hardware Design Engineer (Memory design Verification Profile)

Recruitment Procedure

- Online written test followed by two technical rounds and HR round. You have to clear each stage to get shortlisted for the next.
- Written Test
  - Had 3 sections of 1.5 hours (60 questions) and each section carries 20-20-40 Q:
  - There was no negative marks and code section also not compulsory (I skipped the whole section)
  - Part 1: Aptitude (20 marks): Some common topics are DI, puzzle, time & work, percentage, profit & loss, SI & CI, time & distance, Blood relation and coding/decoding.
  - Part 2: Coding (20 marks): Data structure, C language and Number conversion
  - Part 3: Technical (40 marks): Digital, Analog, Number conversion and Transient network (mainly RC circuit)
  - Level of questions for the written test were moderate, you need to maintain speed and accuracy both.
- I had two technical rounds of approximately 55min and 1:25 hrs time respectively. Although in round 2 Technical and HR rounds were taken together. Each round was taken by two different panellists.
- Round 1 Questions:
  - Draw XOR gate using 2:1 mux
  - Difference b/w sequential and combinational ckt?
  - What is decoder/encoder? What is a priority decoder?
  - Difference between Procedural and continuous assignment
  - Which data types are used in LHS of individual assignment and why?
  - Difference between blocking and non-blocking assignment?
  - I was asked to write Verilog code on paper as instructed by the interviewer and then he asked if I changed the input, how would the output be changed. Also asked to draw hardware synthesis for the same code.
  - Difference between mealy and Moore machine and how many ff are used individually. She also asked to draw the FSM to detect the pattern in both

machines.

- ○ 2nd panellist asked to draw the HPF and their waveform across the output element
- ○ Then he asked what if we at some time t1 remove the supply from that HPF, how would then
- ○ output waveform will change
- ○ He also gave Verilog code and asked how that code will work and their hardware implementation
- ○ Difference between task and function.
- ○ Asked to drew to tristate buffer and how to write Verilog for the same
- ○ In which mealy and moore machine uses more ff and which one prefers over other and why?
- ○ Why is there glitches comes in mealy
- ○ He asked to draw characteristic waveform for NMOS
- ○ Then he changed the PMOS & NMOS position and asked me to how the ckt will work and to draw the output waveform also?
- ● Round 2 Questions:
  - ○ First interviewer was a MANAGER
  - ○ He asked me to draw the RC ckt and find that ckt name?
  - ○ What is time constant?
  - ○ For step input and square input, what will be the output waveform?
  - ○ Draw the output waveform for t >> T & t << T?
  - ○ I made mistakes but he gives hints and by using those hints I correct my mistakes.
  - ○ CMOS inverter and tweak the ckt by changing its power position and asked me after modification how the ckt works?
  - ○ Do the rail-to-rail swings get affected?
  - ○ What will be the output waveform of that inverter for a square wave inverter starting from zero? 10. And couple of more questions related to these ckt
  - ○ He basically judges your problem-solving skills.
- ● After he was satisfied, he called the senior manager and then both started to ask HR based questions like:
  - ○ How have your marks increased gradually from school time till now?
  - ○ Do you like to solve problems?
  - ○ Where do you see yourself for the next 5-10 years down the line? As I was not prepared for HR round whatever the honest thing, I thought that time spelled the same
  - ○ What is your bucket list for your future?

- o They asked me if I had anything to ask from them. Try to ask some technical things regarding the company.

Sources of Preparation
- For aptitude questions you could practise from GFG, for technical subjects like digital and analog solve previous year gate questions. For the coding section, you could refer to the Neso Academy YouTube channel.
- For interviews, follow the classes and learn the concept alongside. Also prepare the previous year questions that were asked in all the companies' previous years.

Other Relevant Information
- I would suggest trying to be thoughtful in the interview. Whatever they ask, try to answer them loudly and let them know what you're thinking.
- Because in case you're thinking wrong, they try to give hints and check whether you are catching those hints correctly or not.
- Generally, interviewers are very polite and friendly, so be confident and loud in front of them.

Sector: ET

Name: Tanmay Anand (2018A3PS0378P)
Company: Micron Technology
Profile: ESSD (Firmware) Engineer

Recruitment Procedure

- Recruitment Test: It had multiple Sections - Aptitude, Programming, Digital, VLSI etc
- Post selection in terms of Profiles applied to:
  - CAD Engineer
  - Firmware Engineer
  - ASIC Verification Engineer
  - Memory Circuit design verification engineer.
- We had 2 Rounds of interviews.
- Round 1:
  - First I was asked about my Summer Internship at Nvidia and my work there.
  - Mostly I was asked a few coding questions:
    - If you have an array of size n with n-1 elements occurring even number or times randomly at any location and 1 element occurring odd number of times (3, 5 etc). how will you extract the odd occurring element?
    - Also, about and finding the middle element of a Linked List in single pass only (only one end to end traversal can be done).
    - Next one was on an array where non occurring elements are replaced by -1 then place each value at index at its corresponding correct position (Something like this).
  - Have sound knowledge about C/C++ and its syntax as they were a bit particular about it. A few questions were about Padding in case of structure memory allocation and about pragma etc. 1 or 2 questions were on assembly language.
  - Also have a very good knowledge about allocation of auto, static, global and dynamic memory variable allocation in C/C++. Then I was asked about my projects.
- Round 2:
  - Initially the interviewer asked about my background and my profile. Also, if you have a 9+ GPA be prepared for the question about "Why not MS?".

- Then asked me about Cache Replacement and Paging in case of operating systems. Also asked about my work at Nvidia.
- Then asked me a few questions from x86 architecture like about registers, segments in memory, addressing modes etc. One question was on Multithreading, how it happens and its need.
- He asked me about my interests in general and family background. I would say this was a mix of HR and Technical Round.

Sources of Preparation
- GeeksForGeeks for C/C++
- Prepare Assembly Language as well
- OS Notes from Kent University (Can be found online may help for a few questions, I had not done OS course at BITS but did it outside of the curriculum)
- Notes From MuP course may help (did not use them much)

Courses and Certification
Microprocessor Programming and Interfacing, Operating Systems, Object Oriented Programming. Computer Architecture may also be helpful, but not very high complexity of it would be asked

Sector: ET

Name: *Anirban Bhuin (2020H1230243P)*
Company: NXP Semiconductor
Profile: Design Engineer

Recruitment Procedure

- Resume shortlisting, online test, 2 technical rounds, 1 HR round
- Online Test:
  - Had questions from digital design, analog design, static timing analysis, few aptitude questions
  - The difficulty level of the test was on the higher side and some were component drag and drop type questions which were very time consuming.
- Round 1 Interview:
  - Had two interviewers, 1 from physical design and other from the digital domain.
  - It lasted around 1 hr. They asked me questions from MOS device physics, latch up and how to prevent it, static timing analysis, counter design, verilog blocking and non blocking assignments etc.
- Round 2 Interview:
  - Purely based on analog concepts.
  - The panel asked me questions from RC circuits, different kinds of amplifiers, their gain, input and output resistance, 1 question from opamp.
  - Interview lasted around 40 mins
- Last round was HR where basic questions about my background were asked

Sources of Preparation

- Digital:
  - Morris Mano book on digital design
  - Anand Kumar book on digital

- STA concepts from Digital Integrated Circuits by Rabaye
- Analog concepts from Behzad Razavi and Allen Holdberg book
- Verilog concepts from Samir Palnitkar book

<u>Other Relevant Information</u>

They were interested in my approach of solving a particular problem rather than the actual solution. They interviewed in 3 different profiles and eventually I got selected in the analog domain. Throughout the interview process, keeping yourself calm and cool is the key to success.

Sector: ET

Name: *Harsh Tyagi (2020H1230239P)*
Company: NXP Semiconductors
Profile: Design Engineer

Recruitment Procedure

- There were 3 stages in the recruitment process: Written Examination, Technical Interview, HR Interview
- Written Examination (90 min) - There were 3 sections in this:
  - Subjective section (4 questions, 40 marks): There were questions in analog (find the collector current after analyzing region of operation), STA (find whether setup violation exists or not + find max frequency + ways to solve setup violation), cache memory question etc.
  - Design section (2 questions, 10 marks):
    - There was a schematic editor available (similar to LtSpice but a lower version – practice this well in mock exams as working with this editor takes time and needs a little practice).
    - In one question circuit was given (eg. FF or latch with some Gates circuitry connected in feedback) and it was to be designed using only 2x1 mux.
    - In the second question, a statement was given in digital ckts and its ckt was to be designed using elements in the editor.
  - MCQ section (20 questions, 40 marks, negative marking present): Questions were from digital, analog, cache memory etc.
- Technical Interview (45-50 min):
  - Introduction: Give a brief intro about yourself
  - M.E. projects – I had written RISC V, SRAM and AMBA AHB projects so was asked to explain them properly and then a few questions on them. Practice your projects well as they are asked almost in any interview.
  - B.Tech. major project (just overview): Didn't expect this but was able to explain it, telling about design, implementation and its application.
  - Design question from written exam:
    - Interviewer asked me why I only did 1 of the 2 design questions and if I could do the other. I said due to lack of time I couldn't try the other one.
    - He then asked if I could do it then and I tried and solved it but it was not optimized so he asked to make a better ckt and I was able

to optimize it as well. I suggest doing at least 1 design question else it gives a bad impression.

- ○ VLSI Design:
  - ■ Questions from Transistor- Leakage current in mosfets and its characteristic curves.
  - ■ Questions from Cmos Inverter – VTC curve, effect of wp/wn on VTC, effect of interchanging nmos and pmos in cmos inverter. Interviewer did not go to combinational/ seq. in VLSI but be prepared with these also.
- ○ STA: Definition of setup and hold time (try to explain with diagram, not the mugged up lines), skew, CDC and metastability concepts.
- HR Interview (25-30 min):
  - ○ Brief Intro
  - ○ About family and their work
  - ○ Why do you know about NXP?
  - ○ Why did I choose M.E. and if I would go for higher studies?
  - ○ Location and profile preferences if any?

Sources of Preparation

- Digital Design – Refer to GATE preparation notes for theory and practice 1M Gate questions and DigiQ questions.
- VLSI Design – Digital Integrated Circuits by Jan M Rabaey, Digital IC Design by Prof. Jankiraman, in5minutes (for reference) Youtube videos
- Verilog – NPTEL Lectures by Prof Indranil Sengupta, ChipVerify, Verilog FAQ pdf
- Physical Design (Design Flow, Low Power Design Techniques, DFT) – VLSI Physical Design Lectures by Prof. Indranil Sengupta, VLSI Expert Youtube videos
- STA – VLSI Expert
- Important websites/youtube videos: VLSI Universe, vlsi4freshers, signoffsemi, physicaldesign4u, Technical bytes
- Important topics: CDC, metastability, synchronizer, FIFO, CMOS Latchup, File Formats, Various tools used, freq. dividers.
- Analog Design - Refer to GATE preparation notes for theory and practice 1M Gate questions.
- C Language (Not asked in NXP anywhere) – GeeksforGeeks
- GATE subjects (not asked in written for our batch but asked in earlier batch) –

Network (Basics, RL, RC, RLC ckts etc.) and Control Systems (Basics, Bode Plots, Controller/Compensators etc.)

Courses and Certification
Digital VLSI Design, VLSI Architectures and CAD for IC design

Other Relevant Information
- All the sources of preparation I have written are sufficient for written and interview of any company except TI analog profile.
- Projects are very important so prepare them well.
- Follow previous years chronicles. They are a good guide for the overall understanding of the interview and its preparation.
- Written test was of moderate level and the interview required good knowledge of basics.
- In the interview, try to have a smile and give answers with confidence. If you do not know any answer, don't give inaccurate answers, instead tell the interviewer about it and try to give some approach to the solution.
- Have a good approach and speak out what you are thinking, explain wherever possible with the help of diagrams.
- Luck sometimes plays an important role: Even if you studied all the things and practiced well, the interview may not be on your side. Maybe you gave an answer but the interviewer was not satisfied with it, or maybe you didn't answer 1 or 2 questions but those were the questions interviewer was seeking then you may not get selected even if you answered all the rest. But you shouldn't feel low about yourself and keep practicing, have faith in yourself and ultimately you will get selected. All the best.

Sector: ET

Name: *Nived Suresh (2020H1400174P)*
Company: NXP Semiconductors
Profile: Design Engineer

Recruitment Procedure

- Online Test, Technical Interview, HR Interview
- The online test had 3 sections:
  - Subjective - This section had 4 questions which included questions from cache memory, BJT amplifier, STA and op-amp based questions. Each question carried 10 marks.
  - Design Based - This section had 2 questions both related to digital electronics in which we had to draw the circuit. One of the questions was to implement the given logic gate circuit using only 2:1 mux. The second question was to delay the input data depending upon the value of another variable.
  - Objective - This section had 20 questions which were mainly based on digital electronics and VLSI architecture.
- The test was easy and there was enough time to attend to all questions. The mock test given by them was helpful to understand the UI for design-based questions.
- The technical interview had 2 panelists:
  - The interview started with one of them asking me to introduce myself. Also, he asked me my preference for the position as they were hiring for both analog and digital domains.
  - My preference was the digital domain. Then he asked me questions which I had done wrong in the test. Then he went through my resume and I mentioned projects related to VLSI architecture and embedded systems; he asked me questions related to them.
  - After the first person was done, the second interviewer asked me questions regarding flip flops and latches. Next, he asked me questions related to CMOS inverters which included questions related to leakages in CMOS, and also asked me to draw the cross section of CMOS to show exactly where the leakages would occur.
  - The interview would be easy if you have good basic knowledge. Also going through the test questions where you are doubtful would really help in the interview.
- The HR interview was on call. The interviewer asked me questions regarding my

background and resume based questions. He also asked me my location preference.

Sources of Preparation

- Digital Electronics: GATE notes and previous year GATE questions.
- VLSI Design: Rabaey and Class notes
- STA from VLSI expert: http://www.vlsi-expert.com/
- VLSI Architecture: Lecture slides
- Verilog: Samir Palnitkar

Courses and Certification

VLSI Design, VLSI Architecture and Digital Electronics.

Other Relevant Information

Based on the interviews I have given; the technical interview is all about checking if you have good knowledge of the basic fundamentals. Also, you must be well informed about everything that is mentioned in your resume. The HR may ask what you know about the company so having some information about the company would be a plus.

Sector: ET

Name: *Sony M Dudhe (2020H1240114P)*
Company: NXP Semiconductors
Profile: Design Engineer

Recruitment Procedure

- Online Written test: The duration of the written test was 90 mins. The paper had two parts ie; subjective type questions and objective (MCQ) type questions.
- Subjective type questions (Total 6 questions were asked):
    - Designing of delay circuits using MUX, gates, and Flip Flops according to the given conditions.
    - A question based on Static timing analysis: To check setup/hold time violation and clock skew calculation for the given circuit.
    - Questions based on memory architecture.
    - A Problem on K maps with an unusual arrangement of literals.
    - Implementation of given expressions employing multiple Multiplexes.
- Objective type questions: Mainly the questions were from VLSI design,Digital electronics, Analog electronics, Microprocessor, Computer architecture.
- Interview:
    - The interview started with a self-introduction, then they asked me some basic questions like setup/ hold time, clock skew, violations, synchronous and asynchronous reset, the difference between Latch and FF, and potential use of latch.
    - Then they asked me about the written test. I made a few mistakes in my paper so they began with those questions in the technical interview. They asked me to do some questions again with some modifications in it and to obtain its optimal solution.
    - Questions based on Phase Lock Loop, designing of up/down ring counter, designing frequency divider (f/5) and ring oscillator.
    - Then they gave me an RC network and asked me to draw its output current and voltage waveform with the appropriate reason for that.
    - Then they asked me to write the verilog code for D Flip Flop with synchronous set and asynchronous reset.
- HR Round: HR asked me about my family, where do I live, how was my interview, location preference. I was also asked to explain my BTech final year project which I did in ISRO like which software I used etc. Then asked me what my GATE rank was.

Sources of Preparation

- Digital electronics: GATE notes, Digital design book by Morris Mano.
- VLSI Design: Kang and Rabaey ,lecture videos by Prof. Indranil Sen Gupta (NPTEL)
  Verilog: Samir Palnitkar Book.

Courses and Certification

- STA and physical design flow by Kunal Ghosh.
- STA – vlsiexpert

Other Relevant Information

Throughout the interview, tell them what you are thinking while solving the questions So,
that they'll know your approach and they will give you certain hints to move forward in
the right direction to get the correct answer.

Sector: ET

Name: *Vusthila Sudheer Reddy (2020H1400179P)*
Company: NXP Semiconductors
Profile: Design Engineer

Recruitment Procedure

- 3 stages: Written Test ,Technical Interview, HR Interview
- Written test: (1 hr 30 min)
  - Questions were mostly from subjects like Digital Electronics, Analog Electronics, Microprocessors and VLSI Design .
  - There were mixed types of Questions which included subjective (eg:they have given BJT circuit and asked to find the Ic, a problem on cache concept and MIPS calculation), objective (MCQ), which were easy and design based Questions. (eg:They has given a circuit which has D-flip flop and logic gates, we have to redesign the entire circuit using 2:1 muxes only)
- Technical Interview: (1 hr)
  - Introduce yourself
  - They asked about my projects which I mentioned in my resume
  - They asked the Questions which I have done partially in the written test and asked me to complete them.
  - They also gave some clues to get the right answers. Mostly 70% of the interview is based on this only. Later they asked me about the concepts of current mirrors, STA (setup time, hold time violations).
- HR Interview: (30 min)
  - He asked me about my family background, my projects and some casual questions.

Sources of Preparation

- VLSI design by Kang
- Digital Integrated Circuits by Rabey
- VLSI expert
- Team VLSI
- Digital electronics from GATE material
- Verilog - Prof.Indranil Sengupta (NPTEL), and verilog textbook by Samir Palnitkar.

Other Relevant Information

After completing the written test, try to find the approach towards solutions for the questions which you attempted in the written test ,they will ask those and ask to complete them.

Sector: ET

Name: *Abhilash Kumar Pandey (2020H1240112P)*
Company: Qualcomm
Profile: RF Software Engineer

Recruitment Procedure
- CGPA Shortlisting (>7), Online Test, Technical Interview Rounds, HR Interview
- Online test had 3 sections (30 mins each):
  - Aptitude – Questions were based on logical reasoning, data interpretation, coding & decoding and some were puzzle based questions
  - Coding – Questions were based on the 'C' programming language and involved fundamentals of C, data structures using C. finding the output of code snippets and finding the errors in codes.
  - Communication – Questions were primarily focused on fundamentals of Digital Communication and a few questions were on Information Theory, Signals and Systems, Digital Signal Processing, Digital Electronics, Probability and Linear algebra.
- Technical Interview (1st round):
  - Project (RP) explanation.
  - Few questions on sampling theorem in baseband and pass band(fundamentals of signals and systems)
  - Few questions on convolution (fundamental of signals and systems
  - Questions on signed, unsigned integers (basic fundamentals of C programming)
  - Programs on linked list.
  - Program on bitwise operator's operations and manipulations.
  - Basics of data structure and C programming like stack, memory locations, pointers etc.
- Technical Interview (2nd round):
  - The 2nd round was completely on C coding and basics of data structure
  - Questions on stack, heap, memory allocation, dangling pointer etc.
  - Program on bitwise operator's operations.
  - Program on array manipulations.

Sources of Preparation

- Class notes and books by Andrea Goldsmith and John Proakis for Wireless Communication and Digital Communications
- Class notes and the book 'RF Microelectronics' by Behzad Razavi for learning RF design for wireless communication
- NPTEL lecture videos by Prof. Aditya Jagannatham
- Revision of GATE syllabus for Signals & Systems, Analog & Digital Communication and Digital Electronics
- https://www.tutorialspoint.com/index.htm and https://www.geeksforgeeks.org/ for revising C & Data Structures and for solving puzzles
- Videos by 'Naresh I Technologies' on YouTube for revising C and Data structures.

Courses and Certification

No such mandatory courses and certification but it's kind of good to have some latest technological certification (but be thorough with whatever you are adding).

Sector: ET

Name: *Abhinav Parihar (2020H1400183P)*
Company: Qualcomm
Profile: Engineering - Software

Recruitment Procedure
- Resume short listing, online test, two technical interview and one HR call
- Resume short listing: CGPA>7
- Written Test: 3 Sections – 20 questions each, 30 mins each (all MCQ)
  - General Aptitude: Data Interpretation, Speed distance, Time work, Profit Loss etc.
  - C Programming: Find output type questions, Find Lines with error
  - Main Topics: Pointers, Operator precedence, arrays, linked lists, structures.
  - Embedded and Communication: GATE communication
- Technical Interviews:
  - Round 1: approx. 1 hr
    - Introduction
    - RTOS basics
    - Scheduling Techniques(explanation, advantages and drawbacks)
    - Semaphores, Mutex
    - C Programming
  - Round 2: approx. 1hr
    - Introduction
    - Why Qualcomm
    - Projects (Major portion of Interview)
    - C Programming
    - Logical Puzzles
- HR call: Location Preference, Information regarding job profile

Sources of Preparation
- Course materials for technical
- Programming concepts from Geeks for Geeks
- Indiabix for General Aptitude
- Verilog practice from HDbits
- Technical written exams – Gate concepts and question solving

Courses and Certification

- Build your own Realtime OS (RTOS) From Ground Up on ARM1 in Udemy
- Verilog lectures by Prof. Indranil Sengupta.

Other Relevant Information

- Refer to YouTube Channel : Planetsklillzz, listening to the interview experiences provides valuable insights.
- Read topics related to the project.
- Explain your approach to the problem given by the interviewer while trying to solve it. They want to see your approach to particular problems.

Sector: ET

Name: *Aditya Sodhani (2016HS230184P)*
Company: Qualcomm India Pvt. Ltd.
Profile: Hardware - Engineer

Recruitment Procedure
- Min CGPA of 7 was the eligibility criteria to apply
- Online Test**:**
  - It had 3 sections, 20 questions (all objective) in each section, 30 minutes for each section and each section had a separate cutoff.
  - Aptitude: The level was moderate (Tip: Always attempt the paragraph questions at last). Try to get a minimum of 8-10 answers right (Recruiters told us that in the PPT). Practice is needed if you are out of touch.
  - Programming Basics: The types of questions were:
    - C and data structures (approx. 10 questions): Special focus was given to case statements, search and sort algorithms, arrays, pointers, tuples(structure), enumerated data types, linked list. Rarely will there be any theoretical question. Most of them will be to find the output of the given code snippet.
    - Error Finding (approx. 3 questions): Which lines of code will give error and of what type.
    - Computer Architecture (approx. 4 questions): Boolean algebra, number systems (conversion, arithmetic).
    - OS Fundamentals (approx. 3 questions): Basic Scheduling algorithms, Time Sharing, Multiprogramming.
    - Difficulty level was easy to moderate. Have a proper revision and if time permits have sufficient practice for this section.
  - Digital Electronics: Topics from Morris Mano Digital Design Textbook till state machines, basic VLSI design concepts. This section's difficulty level was easy.
- Technical Round 1:
  - Interviewer first asked me about myself and my projects. One of my projects was on RISC-V, so he asked me why RISC-V when ARM is already there. He then asked some more questions regarding the project.
  - Next, he started with basic logic design questions like XOR gate using NAND gates, XNOR using 2:1 MUX, half adder - full adder using NAND gates etc.

- He then asked me to make a sequence detector for the 1011 pattern and then asked me to write Verilog code for the same. As the interview was online, I was asked to share my screen.
- He then asked to draw a VTC of CMOS inverters by interchanging NMOS and PMOS of conventional CMOS inverters.
- He showed me a circuit and asked to analyze it for setup-hold violations. He also asked some basic concepts of setup and hold time. He then asked to analyze setup and hold time violations by providing a skewed clock.
- Asked me problems involved in clk domain crossing therefore asked about metastability.
- Then he asked the difference between pass by value and pass by reference. Then asked me to write a C-code to swap two variables using a function (call by reference).
- He then asked an algorithm to convert a decimal integer number to binary and write C code for it (after telling the algorithm he told there was no need to write the code).
- Technical Round 2:
  - Introduce yourself and your project on Newton Raphson divider. He asked me to explain the algorithm and asked me how you verified the design and what corner cases you took.
  - He asked me to make a frequency/2 and frequency/3 logic circuit.
  - There was one design question in which a clk pulse is coming with a 50 % duty cycle. Another signal X is coming with random 1's and 0's (no predefined duty cycle). Make a circuit such that as soon as X gets High, output also gets high and remains high till the very next positive edge of clk comes.
  - I was on the right track, and he gave hints, and I was able to solve it. It's important that the candidate speaks his mind to the interviewer.
  - In C-language if a, b are integer variables which can take values only 0 and 1. Write a single line code using only +, -, * arithmetic operators to find logical OR of a and b.
  - Write a Verilog code to find if an 8-bit number is divisible by 4 or not.
  - Algorithm to implement 2-bit multiplier (shift and add) and asked whether to use half adder or full adder in design.
  - One logical reasoning type question, how will you find $(n-4)^{th}$ element of a stack in an efficient way, whose last element's address(address of nth element) you do not know.
- HR Round: It was an informal HR round in which I was asked about the overall interview experience. Also, my job profile and location were told. It was hardly 10

minutes of talk.

Sources of Preparation
- 70-80 % preparation is done in bachelor's courses and M.E 1st year courses. Below mentioned are for brush up and quick revision.
- For STA: VLSI Expert and Rabey textbook.
- For Verilog: Samir Palnitkar Textbook (PDF is available online)
- For VLSI Design Flow: Prof. Indranil Sen Gupta (you tube lectures) and CAD for IC design course.
- For Digital Logic Design: Morris Mano textbook
- For C: Any online source

Courses and Certification
- All M.E 1st year courses especially VLSI Design, VLSI Architecture,
- Reconfigurable Computing (especially for Verilog projects), CAD for IC design.
- Bachelor's course: Digital Electronics

Other Relevant Information
- Majority of questions in technical interviews will be easy if prepared sufficiently. Even if they are moderate or tough, speak your approach to the interviewer and he will guide you by dropping some hints.
- If some questions from topics like verification, UVM are asked which will be in 3rd semester of M.E students you can tell them frankly that you do not know and will be studying next semester. Do not say no to design questions.

Sector: ET

Name: *Akalankam Sai Teja (2020H1030142P)*
Company: Qualcomm
Profile: Software Engineer Profile

Recruitment Procedure

- Online Test, Technical Interviews, HR Interview.
- The Online test was 90 mins long, 3 sections consisting of MCQs on Aptitude, Programming, and Computer Science respectively.
    - Aptitude - Questions were covered on Profit-loss, Time-work, Percentages, Ratio-proportion, Data Interpretation (Bar charts etc.) and some basic math and aptitude questions.
    - Programming - Given Code snippets in 'C', We have to guess the outputs or errors(if there are any). Topics covered are Structures, Arrays, Pointers, mainly questions related to 1D and 2D arrays linked with pointers, and Recursion.
    - Computer Science - Be thorough with CS core subjects like Operating Systems (Semaphores, Memory Management), Data Structures (Polish notations, Linked List, Trees, BST), and basic idea on DLD works fine.
- Technical Interviews: I had two rounds of TIs.
    - In the first interview, the interviewer started with asking questions based upon memory management, virtual memory concepts from OS, and continued with questions about schedulers and its internals and then he gave me coding problems related to Bitwise operations and Dynamic Programming which I need to code and explain.
    - Coming to my second interview, it started with the discussion on my resume, continuing with explaining the internals of my projects. The interviewer asked questions related to OS, coding problems related to Linked List, Graphs and also some puzzles and logical reasoning questions.
- HR Interview: It happened on the phone. It was a pretty cool conversation related to the details of the team I would work, relocation etc.

Sources of Preparation

- GeeksforGeeks for covering mostly all DSA topics.
- For the preparation of CS core subjects, my GATE preparation helped me a lot.

- Besides, I also have referred to articles related to 'C' and 'C++' programming languages in GFG.

Courses and Certification
Courses related to OOPS and OS will be helpful.

Other Relevant Information
Be thorough with your resume, cover basic to medium questions in all topics of DSA starting from Arrays to DP. Try to explain things on point with a smile.

Sector: ET

Name: *Anuj Sanathanan (2020H1400171P)*
Company: Qualcomm
Profile: Hardware Engineer

Recruitment Procedure
- The recruitment process included an online test followed by 2 technical interviews and one HR round.
- Online test:
  - The test had 3 sections: Aptitude, Programming and Technical.
  - Aptitude questions were of medium difficulty level and time management is must for it.
  - Programming section contained basic concepts of C programming and error identification from snippets.
  - Technical section had GATE level digital electronics questions.
- Technical rounds were conducted on Microsoft Teams platform each round lasting for 45 mins.
- 1st Technical round:
  - Introduction and questions based on projects. Most of the interview was based on Digital electronics.
  - I was asked about the implementation of Booleans logics, reduction of Boolean function, synchronous and asynchronous circuits.
  - I was tested on understanding of data transmission and interpretation of them using digital electronics.
  - Questions were also focused on the counters, flip flop conversions and their practical applications as well as interpretations.
  - Last part of the interview was focused on my location and interests.
- 2nd Technical round:
  - The interview started with discussion on Research practice and a few other projects.
  - I was asked about Digital electronics like the Truth table of various gates and implementing them using universal gates, Boolean algebra and Boolean function implementation.
  - Later half of the interview focussed on ASIC design flow, Clock gating, Clock synthesis, STA and understanding the working of FPGA because few of the projects were implemented on FPGA.

- - The interviewer was supportive at times whenever the answer was partially correct.
- HR round: This was just a brief discussion to inform officially that the interview process was complete and to congratulate for clearing the process.

Sources of Preparation

- GATE material for Digital Electronics
- Vlsi-expert (STA)
- Course lecture and notes for VLSI design, VLSI Architecture, Embedded System Design
- For C programming and Aptitude - Let us C and R.S Agarwal
- Clear understanding of projects and Research Practice.

Courses and Certification

Digital Electronics, VLSI Design, VLSI Architecture and Reconfigurable Computing

Other Relevant Information

- Maintaining speed and accuracy for online tests is mandatory.
- Cracking the C programming MCQs is the key to clear online tests, be well prepared with finding outputs of code snippets and errors in the given code.
- Be confident of the topics covered in the Course Curriculum and have a good grip of the projects and how they are practically helpful.
- Very good understanding of Digital electronics and how they can be applied practically to different situations.
- Answer the interview with complete confidence and try to answer all the questions with whatever understanding you have about that topic.

Sector: ET

Name: *Anwesha Swain (2020H1400172P)*
Company: Qualcomm
Profile: Hardware Engineer

Recruitment Procedure

- Resume Shortlisting (CG criteria>7), Online Test, Technical Interview(3 Rounds), HR
- Online test had 3 sections:
  - Aptitude and Data Interpretation (20 Ques-30 min) - Questions were based on speed distance, work and time, profit loss, ratio & proportion, logical reasoning, pattern identification, bar graphs
  - C programming (20 Ques-30 min) - MCQs based on pointers, function, macros, arrays, finding the errors in code, some questions on computer architecture, digital number systems
  - Digital Electronics (20 Ques-30 min) - Questions were based on counters, registers, combinational circuits, Boolean expressions, mux, basic questions on microprocessor, risc and cisc.
- Test was easy. However, it is important to maintain speed and accuracy to finish all questions. Each section had its own timer so there was no option to navigate to the previous section. Negative marking of 0.25 was also there, hence one needs to be cautious.
- Interview: The interviews were conducted for three rounds on MS teams
- Round 1(1 hr):
  - I was asked about my previous work experience.
  - FPGA vs ASICs
  - Questions related to projects which were implemented using verilog- While synthesizing what issues/ challenges I faced and what approach was followed to solve those issues while design synthesis.
  - Coding in verilog - Questions were based on FSM, pattern detector, blocking and non blocking statements, identifying the circuit from the code.
  - Code in C for a positive edge detector.
  - Control path and data path related questions.
  - C programs based on bit manipulations using bitwise operators.
  - C programs to print patterns.
  - Find output of C programs- questions were based on pre increment, post

increment,arrays
  - ○ Microcontroller block diagrams, interrupts, why interrupts are generated
  - ○ Puzzles
- Round 2 (1 Hr):
  - ○ Question based on the Hardware Abstraction Layer which I implemented in a project to control the GPIO ports based on the inputs passed(based on STM32 microcontroller).
  - ○ Describe in detail how to control the various input, output devices in a home if you have been given all the components, how to make the connections and how to configure all parameters in the microcontroller.
  - ○ What is a pull up and pull down resistor?
  - ○ Coding questions – To detect Palindrome numbers between 500 to 1000, find the frequency of a number in an array.
  - ○ Question to find output of C programs- Based on the range of integers and char, outputs on arrays, functions, recursions.
  - ○ What happens when a function is called from another function?
  - ○ Volatile keyword significance, Watchdog timer
- Round 3 (30 mins):
  - ○ Write a C code to make a 1Kb buffer and fill it with integers in a random sequence
  - ○ Find output to C programs- questions were based on bitwise operators, pointers and arrays
  - ○ What is cache? How data is accessed from cache, under what situation cache miss takes place.
  - ○ Concepts on Pipelining.

Sources of Preparation
- C programming - Neso academy, Geek for Geeks, Let Us C
- Verilog - NPTEL video lectures by Indranil Sengupta, Samir Palnitkar, HDL bits(for practice), more can be learnt while implementing the projects.
- Digital Electronics - Previous Year GATE questions.
- RISC, Pipelining Concepts - Lectures taught in class by Prof S Gurunarayan
- Embedded System s- Meetha Mam's notes and lectures are enough, more can be learnt while implementing the projects

Sector: ET

Name: *Gayathri K S (2020H1240103P)*
Company: Qualcomm
Profile: RF - Software Engineer

Recruitment Procedure
- Written Test, Technical round (2 rounds), HR Round
- Written test:
  - Communication domain based test: Basics of probability theory, signals and systems, ADC, CTP, ADSP
  - Aptitude test: Time and work, Speed and distance, analytics/data interpretation
  - C programming basics: Output of a code, error, data structures, sorting and searching, arrays, pointers, memory management
- Technical Rounds:
  - Communication related: Detailed explanation regarding projects, transceiver block diagram(include RFME related concepts), concepts of OFDM, Nyquist theorem, Convolution, correlation, filters(IIR/FIR), ADC basic, LTE basics.
  - C programming: array manipulation(search sort/find missing numbers, Storage classes in C, stack vs heap, memory organization of a program in C, bitwise operator (to be done on hacker rank platform)

Sources of Preparation
- Written Test: GeeksforGeeks, Indiabix, RS agarwal, class lectures (ADC, CTP, ADSP)
- Technical rounds: NPTEL, class lectures (ADC, CTP, ADSP), Geeks for Geeks, any C text book, Youtube series (naresh technologies, mycodeschool), LTE basics

Courses and Certification
- **Courses**: RF microelectronics, Advanced Digital Communication, Wireless Communication, Advanced Digital signal processing, CTP, MPC
- **Certification**: Not that important

Other Relevant Information

- Research practice and projects should be prepared and presented confidently as that can play key-role during interview rounds.
- Always mention the courses in which you have a good grip on. Try avoiding keeping a lot of unnecessary and irrelevant courses. Details on a resume are supposed to be ones which you are very confident about.

Sector: ET

Name: *Gopesh Shukla (2020H1230234P)*
Company: Qualcomm
Profile: Hardware Engineer

Recruitment Procedure

- The entire process is divided into a written test, 2 technical rounds and HR.
- Written test:
  - 3 sections with 20 questions each. Aptitude included profit loss, time and work, probability and data interpretation.
  - Second section had basic binary arithmetic (3-4 ques), fundamentals of OS (3-4 ques) and programming language- C.
  - Technical round had majority of questions on digital electronics (sequential, combinational, FSM and ADC/DAC) and 5-6 miscellaneous questions on VLSI as well as other GATE concepts.
- Technical Round:
  - In my case both the technical rounds (90 min) took place back-to-back without any break.
  - It started with a brief introduction of myself and the entire interview kept on moving around the basics without even a single discussion on my projects. T
  - opics for discussion in my case included- basic logic gates using MUX, FF conversion, working of CMOS inverter, TG, DFF from TG, FSM sequence detector (Mealy and Moore), regions of operation of MOSFET, types of power, techniques to reduce power, Verilog (swapping contents of two registers, blocking and non blocking, simulation events, delta delay, test bench building), RISC ISA and pipelining. The interview ended with an aptitude puzzle.

Sources of Preparation

The best source of preparation is undoubtedly classroom content. For any ambiguity or doubts coming across classroom content be pleased to try out:

- Digital IC Design by Jankiraman sir (IIT M) - Logical effort, static and dynamic logic, sequential circuits and concepts (setup and hold time for FF and latches.)
- Hardware Modeling by Indranil sir (IIT KGP)- Verilog and pipelining concepts

- Physical Design by Indranil sir- Physical design and backend steps
- Physical Design by Kunal Ghosh (Udemy) - STA and overview of physical designing
- Digital Electronics by Goutam Saha sir (IIT KGP) - Mealy and Moore
- GATE concepts on digital electronics
- Standard textbooks of VLSI

Other Relevant Information
- For aptitude, do prepare the shortcuts on topics mentioned above from YouTube and practice DI which is very time hungry.
- Shortcuts solve the questions in 5-10 seconds of time. GATE concepts would be sufficient for the technical round.
- Patience and confidence are the key to an interview. I had messed up SR to JK flip flop conversion within the initial 15 minutes. However, I confessed to the fact about being stuck at that point and the panelists were kind enough to move on.
- They provide sufficient time to answer, so think before starting. Explain your approach for every question asked as it matters the most.
- In case you feel uncomfortable with any topic or if you feel the interview is deflecting from what you have prepared be honest and request them to kindly move on (I was asked questions on device physics and scripting languages.)
- Last but not the least, have a stable internet connection, do remember to keep a mouse handy as you might be asked to explain on MS Paint, and dress well. Best wishes for future endeavors.

Sector: ET

Name: *Jonnabhatla Venkata Naga Saketh Ram (2020H1230242P)*
Company: Qualcomm India Pvt. Ltd.
Profile: Hardware Engineer

Recruitment Procedure

- There will be resume shortlisting based on CGPA – 7.0 and above (try to keep it above 7.5). Then there will be a written test followed by 2 rounds of Technical interviews (or combined interview for longer duration) and finally HR interview.
- Written test:
  - The written test consists of 3 sections and the duration of the test is 1:30 Hrs and was conducted online using Hirepro. Total marks were 60 and there was negative marking of 0.25 for wrong answers.
  - Aptitude (20 questions and 30 mins duration) – Difficulty level is easy to moderate
  - Programming Skills (20 questions and 30 mins duration) – This section would be tough for those who are not familiar with C programming.
  - Digital electronics (20 questions and 30 mins duration) – difficulty level would be similar to that of GATE questions.
  - The aptitude section consisted of questions from time and work, time-speed-distance, ratio and proportions, averages, profit-loss, simple/compound interest and few data interpretation questions as well. The level would mostly be moderate, try to practice problems of different models and be familiar with all of them so that you can solve them quickly.
  - In the next section mostly C programming questions were asked such as trying to find the error in the code, output of the C code snippet, and a few questions from Data structures, OOPS concepts and Computer organization were asked. So, be prepared with basics of the above topics and solve as many problems (finding out errors, finding the output) as possible.
  - In the digital electronics section mostly the questions were asked from digital circuits and a few questions related to ADC/DACs, oscillators were asked. So be thorough with the GATE digital electronics syllabus and also prepare for the analog part. Try to solve previous GATE questions.
- Technical interview:
  - There was a combined interview for round-1 and round-2 for nearly 1:30 hrs. In this mostly the interviewers tested on the basic knowledge I had. They started with simple questions about digital circuits and slowly

increased the difficulty.

- ○ I was asked to implement FSM to detect a pattern and find out the expression for output, implement a function using logic gates and MUX, design of frequency dividers, a few questions about Verilog and asked to write a small Verilog code.
- ○ And a few questions were asked from VLSI design such as different types of power dissipation in CMOS circuits, design of a latch using transmission gates, and basic questions about STA. Finally they asked a few questions from the C programming language and a few puzzles.
- ○ The interviewers were friendly and helpful. They were mostly focusing on the approach rather than the final answer, and also they provided hints whenever I got struck in between. The overall interview experience was very good.
- HR interview: This was a very short interaction with the HR, where they asked me about location preference and said about the domain which I will be working with.

Sources of Preparation

- Aptitude – practice different type of problems from IndiaBix or any good such as R.S Aggarwal.
- C- Programming – for C programming revise C-basics from any good book or GeeksforGeeks. Also have an idea about data structures and OOPS concepts.
- Practice GATE syllabus from your GATE notes/material and practice previous year GATE questions (Digital, analog). For digital you can revise concepts from Morris Mano textbook.
- Prepare thoroughly the projects which you have mentioned in the resume (If you are not confident about any projects don't mention them in your resume).
- Revise thoroughly VLSI Design, CAD for IC design, VLSI architecture subjects. You can refer to the prescribed textbooks for these subjects respectively.
- Important topics in VLSI design are CMOS inverter design basics and its characterization, logical effort, Elmore delay, SRAM design and operation, design of Flip-Flop/latch.
- Important topics in VLSI architecture are CISC and RISC basics, Pipelining and different hazards in RISC.
- In CAD for IC design have clear understanding of VLSI design flow (frontend and backend), different file formats and a basic understanding of what is done in each step.
- Practice Verilog codes at least for basic circuits like (D-FF, MUX, counters, shift

registers, decoder/encoder…..). Have understanding about blocking and non-blocking statements (with and without delay), and other important concepts in Verilog. Samir Palnitkar textbook would be sufficient. Mainly focus of Synthesis part.

- Static Timing analysis (STA) is very important and can be learnt from VLSI-expert. Practice more problems related to STA and how to remove setup and hold violations.
- Study and solve DigiQ question bank.

Courses and Certification

Not necessary to have any certifications. If you wish you can do courses from Udemy provided you have complete understanding while attending the interview.

Other Relevant Information

- Speak out loud and tell whatever you are doing/solving to the interviewer. They judge your approach rather than the final answer.
- Interviewers provide hints so try to grasp them. If it is an online interview writing pad would be helpful to interact effectively. Be confident and stay relaxed.
- Don't keep any unnecessary things in Resume.
- Various NPTEL courses are available by Indranil Sengupta (Physical design, Hardware modeling through Verilog), Janakiraman (digital IC design) would also be helpful while preparation.

Sector: ET

Name: *K Srinivasan (2020H1240101P)*
Company: Qualcomm
Profile: RF Software Engineer

Recruitment Procedure

- CGPA Shortlisting, Online Test, Technical Interview Rounds, HR Interview
- CGPA cutoff was 7 CGPA or higher
- Online test has 3 sections:
    - Aptitude – Questions were based on logical reasoning, data interpretation, coding & decoding and some were puzzle based questions
    - Coding – Questions were based on the 'C' programming language and involved fundamentals of C, data structures using C, finding the output of code snippets and find the errors in codes
    - Communication – Questions were primarily focused on fundamentals of Digital Communication and a few questions were on Information Theory, Signals and Systems, Digital Signal Processing and Digital Electronics
- Technical Interview consisted of two rounds
- Round 1:
    - In the first round, the interview revolved around RF, wireless communication and C coding
    - Questions were asked on the receiver chain of modern wireless systems with emphasis on mixer design and LNA Automatic Gain Control
    - Questions based on different multiple access technologies
    - Questions on selection of OFDM parameters
    - Questions on LTE Radio frame, resource blocks and resource elements
    - The questions on C involved fundamentals in C, array manipulation and programs on signed/unsigned variables
- Round 2
    - The second round was focused on C coding
    - Questions were based on pointers and dynamic memory allocation in C
    - Programming in C using bitwise operators
    - Questions on memory management and instructions for memory manipulation in C

Sources of Preparation
- Class notes and books by Andrea Goldsmith and John Proakis for Wireless Communication and Digital Communications
- Class notes and the book 'RF Microelectronics' by Behzad Razavi for learning RF design for wireless communication NPTEL lecture videos by Prof. Aditya Jagannatham
- Revision of GATE syllabus for Signals & Systems, Analog & Digital Communication and Digital Electronics https://www.tutorialspoint.com/index.htm and https://www.geeksforgeeks.org/ for revising C & Data Structures and for solving puzzles
- Videos by 'Naresh I Technologies' on YouTube for revising C

Courses and Certification
- The elective RF Microelectronics is very useful for the profile of RF Software Engineer
- Good knowledge of the fundamentals in C and data structures is essential

Other Relevant Information
- A comprehensive understanding of Digital Communications and Wireless Communications is essential as most of the questions involve testing the understanding of fundamentals in these subjects.
- Knowledge of analog electronics is very useful as concepts in RF microelectronics are built on it and answering questions related to RF design requires a good understanding of underlying analog circuits.
- Knowledge of coding especially in 'C' is very important not only for this job and profile, but also for all companies, because both the online tests as well as technical interviews have coding sections.
- Focus should be given on solid understanding of the fundamentals in C and data structures. It would be good to have a continuous practice on programming using different data structures, pointers and arrays.

Sector: ET

Name: *Nishad Sahu (2016HS400215P)*
Company: Qualcomm
Profile: Software Engineer (Embedded)

Recruitment Procedure
- Online Test (60 minutes): Aptitude and C programming
- Technical Interview Round 1 (around 1 hour):
  - The interviewer first asked me to introduce myself and asked me about core courses I have done in ME Embedded Systems. I said in Sem 1 our core courses were Real Time Systems and Embedded System Design and we had 2 more elective courses. He then asked more about Real Time Systems.
  - Following were the questions about Real Time systems :
    - What are the different kinds of scheduling techniques?
    - My answer: Periodic scheduling , earliest deadline first , least slack time first etc.
    - In round robin scheduling what is the disadvantage?
    - My answer: If there is a smaller task in the system and the number of tasks are many then the smaller task even though having a very little execution time will have to wait for a long period of time to get completed.
    - What are the factors we need to keep in mind while deciding the time slice/gap in round robin scheduling ?
    - My answer: Firstly, we need to see the context saving time is smaller than the time slice given to the task. Also no task should miss its deadline, or even if it misses considering a soft deadline it should complete as fast as possible.
    - What is the difference between a semaphore and a mutex ?
    - Answer: I told him I could not recall which one does what but explained to him the 2 different concepts of SPIN LOCKING MECHANISM and SIGNALING mechanism nicely. I told him that one of them follows the spin locking mechanism of repeatedly coming in the ready queue and checking if the shared resource is free and the other follows the signaling mechanism in which it waits for the signal for the task which has already acquired the shared resource. Their functions are actually SPIN LOCKING

MECHANISM: Mutex and SIGNALING : Semaphore
- So if I have to design an embedded system with limited memory what would be your approach?
- My answer:
  - I will check how much accuracy is required for the application and try to use the minimum number of bits for computation in the system to achieve that accuracy. Using a lesser number of bits will ensure lesser memory usage.
  - I will see if some compression algorithms can be used to compress the data like audio, video or images in the system for long term storage or storage till the time the data is offloaded to another device
  - Also we must follow efficient coding techniques while programming the MCU and ensure that we use the minimum amount of global and static variables in the system. Also if any dynamic memory is allocated and it is not any more required then we should free that space immediately
  - He was satisfied with this and remarked as good.
- Then he asked me to come to the hacker rank platform and gave me a question to code and also asked me to first explain my approach
  - Implement the code to find the second largest element in an array
  - Write a code to find the number of zeros in the factorial of a number using least possible memory and computation
- Technical Interview Round 2 (around 35 mins):
  - There was a discussion on my resume
  - You have implemented RTOS concepts like Priority inheritance, mutex, signaling etc, in a project. So can you explain to me what is priority inheritance?
  - I had done a project on K-means algorithms in my Reconfigurable Computing course, so he asked me what K-means algorithm is and also if I knew some other Machine learning algorithms and neural networks.
  - I had a project on SRAM in VLSI design , so he asked what SRAM is , what is done while reading and writing from memory?
  - If I have to write data in memory then is it immediately written? (concept of Cache and dirty bit)
  - Have you done any courses on DSP? Have you heard about the Nyquist theorem and sampling rate? Is it possible to sample signals accurately below the sampling rate?

- ○ What terms will the Fourier transform of a square wave contain?
- ○ Questions on C programming :
  - ■ Write a code to swap to variables without using a third variable.
  - ■ Use this function to sort an array. Which sorting technique have you used for this?
  - ■ Which sorting technique has the least complexity?

Sources of Preparation

- Geeks for Geeks for studying the fundamentals of C programming like sorting techniques, bubble Sort, pointers, pass by reference, pass by value etc.
- Nicely attend the core courses like Real Time Systems, Embedded System Design, Software of Embedded System. Many important topics for interviews are covered well by our professors in the lectures itself like the one on difference of Mutex vs Semaphore(covered by Meetha V. Shenoy Madam in Software for Embedded Systems course).

Courses and Certification

I had none. But courses which make your C programming fundamentals strong will be very beneficial and actually the key to crack the embedded/firmware profile interviews.

Other Relevant Information

- Once you get an interview invite with a company person then you can check his background on LinkedIn or any other website to know his specialization, interests and field of work.
- While solving a coding question or any other analytical question, please share your approach with the interviewer from time to time. So that he is aware of your thought process.
- If you don't know the concepts or know the concept but don't remember the terminologies, tell them frankly instead of hiding or bluffing. Explain them the concepts nicely as they look for conceptual understanding of students.
- Don't include anything in your CV for which you don't have a certificate or technical expertise. Either one is important. Otherwise you will not be confident in the interview and there will be tension in mind which will anyways reduce your

output at interview. Being honest and truthful will make you confident as well as help in the long run in your profession.

Sector: ET

Name: *Sayan Dey (2020H1120273P)*
Company: Qualcomm
Profile: Software Engineer

Recruitment Procedure

- The Recruitment Procedure consists of an Online Test followed by 2-3 Technical Rounds followed by an HR Round.
- Online Test was conducted in Hirepro.
- For Technical Rounds, platforms used were Hackerrank CodePair and Microsoft Teams.
- Online Test:
  - The Test is divided into three sections: Aptitude, Computer Programming, Computer Science. All questions are in MCQ format. Each section was allotted 20 questions with 30 minutes each, which makes the overall marks as 60 and the time duration is 90 minutes.
  - Aptitude: There were 1 question each from Logical reasoning and Data Interpretation having 4 participating questions each. Rest of the Questions are from number system, coding/decoding, averages, set theory, ratio and proportions. It is suggested to attempt the questions from LR and DI to increase your chances of selection in the written test.
  - Computer Programming: Basic C programming questions were asked, which may include input/output based questions, static and global variables, storage classes, recursion, Code errors (compile/runtime error), functions, array, pointer etc. Other theoretical concepts and two questions from OOPs were asked.
  - Computer Science: Questions are mainly from OS, Linked list, Stack and Queues, Trees, Arrays, few from DBMS and Networking.
- Technical Round 1: (Duration: 50 minutes)
  - Tell us about yourself. Asked about my work experience, technologies used and languages known. Asked about technologies and tools used in academic projects.
  - Started with basic C questions: Storage classes, their initial value and scope. Told to demonstrate the working static, global and extern keyword. Call by value, call by reference. Asked to show a pointer to a function in the code.
  - Told to write code for given linked list questions: Delete a node in linked list at nth position, Finding the loop in linked list (shown both slow and

fast approach).
- ○ Bitwise operation: Count the number of set bits, difference in working of while and for loop.
- ○ Jumping on to the OS questions: Different types of IPCs, how to create processes (fork), asked about some Linux commands and its purpose if familiar, virtual memory.
- Technical Round 2: (Duration: 1 Hour)
  - ○ Started with a question of bit manipulation: p = a & (a-1);
  - ○ Asked about what this code is doing (unsetting least significant bits).
  - ○ Told to write the code for counting the number of set bits. Provided a simple approach, and again asked to optimize it.
  - ○ Print the elements of the linked list in reverse order: Explained at least two approaches and asked to write the code for one.
  - ○ Print the elements of BST tree as per inorder traversal: Straightaway given the recursive solution, then told to write the iterative approach.
  - ○ Explain level order traversal and write the code. Explain the approach of finding the diameter of the tree.
  - ○ Asked about the work done in the project.
  - ○ OS questions: Difference between counting semaphore, binary semaphore and mutex, Page Fault, Why Caching is required in memory management, Demand Paging.
  - ○ Here the Interviewer concluded the interview by providing the feedback. On asking any questions for them, I asked about the work culture and the kind of work I will be assigned.
- Managerial Round 3: (Duration: 15 minutes)
  - ○ Provided the feedback based on the previous two rounds.
  - ○ Given a set of choices of technologies, and to choose them based on priority.
  - ○ Asked about 3 programming languages in order of priority.
  - ○ They normally do this to check if the prioritised interest matches up with the requirements of their project. If you respond clearly, they will further explain you about the project in brief.
  - ○ They may ask questions regarding your educational background and projects, in my case, it was not asked.
- HR Round: (Duration: 5-10 minutes)
  - ○ This was a telephonic round where I received a call from HR, just after 30 minutes of Round 3.
  - ○ They asked if I am comfortable with the work as discussed in the previous round. Keeping my response positive and analysing the feedback from

previous rounds, they have confirmed the offer and location, and wished me luck for the future.

Sources of Preparation

- For Online Test- https://prepinsta.com/qualcomm/
- For Technical Interviews- Practice coding from InterviewBit, Leetcode, GFG.
- From the Qualcomm point of view, Bit manipulation, Linked List, Trees, Stacks and
- Queues, Arrays would be sufficient.
- For CS subjects like OS, DBMS, Networking, revise GATE CS materials, or refer
- GeeksForGeeks. OS should be given more priority during preparations.

Courses and Certification

Courses: Data Structures, C programming, Operating System, RTOS, Software for Embedded Systems.

Other Relevant Information

- After the Online Test is conducted, there will be 2-3 days of gap to prepare. Then, the Technical Interview rounds along with the HR round will be conducted all at once.
- It is suggested to wear formals during interviews. It gives a good impression.
- Interviewers are very helpful. Even if you are stuck in any question, they will help you out by finding the approach, or recollecting the concept. Even if you are not able to conclude the solution, it is important to explain the approach. Hence, try your best not to give up.
- You can ask the interviewer if the algorithm can be explained in a whiteboard (will be there in the coding platform).
- Keep your questions handy to be asked to the Interviewer and HR. Sort out accordingly what can be the appropriate questions to be asked.

ALL THE BEST!!

Sector: ET

Name: *Siddharth Shringi(2020H1230248P)*
Company: Qualcomm
Profile: Hardware Engineer

Recruitment Procedure
- Online test: It consists of three sections – Aptitude, C and Technical
  - Each section will have 20 questions and about 30 mins to finish each section. Totally 1.5 hrs.
  - You can't switch between the sections. Only when you complete a section can you go to the next section.
  - Aptitude section: It had data interpretation, data inference, speed, time and distance problem, pipe siren problem and other basic topics.
  - C section: It had questions to find the output of a code snippet, question regarding data structures like linked list, queue, stack etc.
  - Technical section: Questions related to flip flop and latches, memories, logic gates, k map, digital design etc.
- Interview: There were two technical interviews and one HR.
  - Each technical interview lasted about 45 mins to 1 hr and the HR interview was about 5 to 10 mins.
  - In technical interviews, they mainly focused on the flip flop, latch designs, Verilog coding, clock domain crossing techniques, synchronizers, MUX design, setup and hold time concepts, metastability etc.
  - In the HR interview, they asked about ourselves, job location

Sources of Preparation
- For aptitude, try RS Agarwal book and websites like Indiabix etc.
- For C and data structures, use the Geeksforgeeks website. Books like Let us C are also good.
- For digital design use Morris Mano.
- The CMOS design can be studied using the CMOS Digital Integrated Circuits - Analysis and Design by Kang and the Digital Integrated Circuits by Jan M. Rabaey. Rabaey gives more detailed concepts. So I suggest going through both books to understand the concepts well.
- The setup and hold time concepts can be studied from the vlsiexperts.com website. The website can also be used for the cross domain crossing techniques.

- The CISC and RISC architectures can be learned from the VLSI architecture course slides. You should properly know the difference between them.

Other Relevant Information
- Try supporting the statements you make with an example. E.g., if you are asked about setup time, rather than just defining setup time, draw a circuit and show what exactly you mean by setup time.
- It's all about confidence and how dedicated you are towards the domain. Your lack of dedication towards the domain and company can be a deciding factor even if your interview goes extremely well.

Sector: ET

Name: *Sunit Behera (2020H1230251P)*
Company: Qualcomm
Profile: Hardware Engineer

Recruitment Procedure

- CGPA (> 7) shortlisting, Online Test, Technical Round 1, Technical Round 2, HR
  - Online Test had 3 sections with time duration 30 min each section:
  - Aptitude : Quantitative , Logical reasoning and data interpretation
  - Programming : C, C++, Data Structure
  - Technical Section : Digital Electronics, 8085 microprocessor, Computer Architecture
  - Test was easy, however you got +1 for the correct answer and -0.25 for the incorrect one. Going back to previous sections is not allowed.
- Technical Round 1:
  - The first round went for 45 mins.
  - The interviewer asked me to introduce myself.
  - Then he asked me to explain the projects mentioned in the resume (Focussed more on Research Practice project: memory computing in my case, and related fields) for almost 10 – 15 minutes.
  - Then he asked me the following: DRAM, SRAM, reducing propagation delay, effects of reducing mosfet length, power and other design parameters, process corners, technology nodes, latches, flipflop, details and different optimizations in pipelined system, STA, metastability, synchronisers, low power, threshold voltage dynamics, lastly asked me my domain interest and if I am interested in RTL design.
- Technical Round 2:
  - It went for almost 25 – 30minutes.
  - The interviewer asked me to introduce myself, write a Verilog code for asynchronous reset D Flipflop and assigned me a problem statement to design a synchronous system to detect input transition and assign output a pulse of width of Tclock if 0 -> 1 transition detected and for 1 -> 0 transition output will have a pulse width of 2xTclock.
- HR round: It was just a short 5mins telephonic interaction, she asked me about location preferences, work profile and if I had any other queries.

Sources of Preparation

- VLSI Design from Nitin Sir's lecture, in5minutes YouTube channel and Rabey textbook.
- VLSI Architecture from Prof. Gurunarayan and Chandra Shekhar Sir's lecture series.
- STA and Physical Design from VLSI Expert, Team VLSI YouTube channel and Udemy.
- C, C++ from GeeksForGeeks and Neso Academy YouTube channel.
- Verilog lecture by Prof. Indranil Sengupta, NPTEL

Courses and Certification

You should have good knowledge and experience on Verilog. Courses such as VLSI Design, VLSI Architectures and CAD For IC Design are mandatory.

Other Relevant Information

- You must know every possible detail regarding your mentioned projects in your resume, and pursue your research projects seriously.
- Try to support your statements with short examples, analyse well and be thorough with linked concepts.
- Be thorough with basics of IC Fabrication concepts.
- Try to make a voiceover while solving problems given by the interviewer.
- Due to this pandemic, we had an online interview, to make sure to have a strong internet connection. I used a Wacom One digital writing pad which made it convenient for both of us to interact well.
- Be thorough with basics first.

Sector: ET

Name: *Bhuvnesh Tarachandani (2020H1230231P)*
Company: Texas Instruments
Profile: Analog Design Engineer

Recruitment Procedure
- Written test: Aptitude (20Q - 30min), Analog section (20Q - 45min) and Digital section (20Q - 45min)
- Marking Scheme: 1 mark for the correct answer, -0.5 for the wrong answer
- One Technical Round
- One HR round: Short interaction with HR about profile preference
- Cutoff: 7 CGPA

Sources of Preparation
- **Aptitude**:
  - GATE notes and Questions from IndiaBix
  - Important topics: Speed Time and Distance, Time and Work, Percentage, Ratio and Proportion, Profit and Loss, Allegations and Mixtures, and Logical reasoning.
- **Analog section:**
  - Prof. Behzad Razavi lectures of electronics 1&2 (YouTube)
  - GATE Questions of Analog Electronics, Chembiyan T (YouTube) for RC, RL, RLC, and LC oscillator circuits
  - Book: CMOS Analog design by Behzad Razavi (along with Analog IC Design Class notes)
  - Some Concepts from Sedra, Kenneth C. Smith (only for OPAMP circuits and high-frequency analysis of MOSFET) and Prof. Ali Hajmiri YouTube Lectures (for Bandgap Reference Circuit
  - Lectures from Prof. Nagendra Kishnapura, IIT Madras (for OPAMP Designing).
- **Digital section:**
  - Rabaey (Sequential and combinational circuits)
  - CMOS Inverter and Memory Design from Kang
  - GATE Questions of Digital Electronics, Static Timing Analysis (VLSIExpert)

- ○ VLSI Architecture (from Class Notes)
- ○ Lectures on Digital IC Design by Prof. Janakiraman Viraraghavan, IIT Madras(YouTube).
- ○ Verilog from YouTube Lectures by Prof.Indranil Sengupta, IIT Kharagpur.
- **Important topics for Analog Profile interview**:
  - ○ RC circuits - Practice the circuits or predict the response intuitively before getting into the mathematical approach
  - ○ OPAMP - Circuits and application of OPAMP in both types of feedback
  - ○ Feedback concepts - How to check positive and negative feedback, dominating feedback when both are present
  - ○ Project is very important, they can ask about the design procedure of the project and problems faced while doing the project and its rectification
  - ○ Concept of CMOS Buffer
  - ○ Oscillators and Time Constant Analysis are very important for the written as well as for the interview.
  - ○ Cover Basics of Signals and Systems and Control System if time permits.
- **Important topics for Digital Profile interview**:
  - ○ Elmore Delay Model
  - ○ STA
  - ○ Design of Counters
  - ○ FSM
  - ○ Memories
  - ○ Worst case Delay Analysis of various combinational Circuits.
  - ○ CMOS inverter and its noise margin and power analysis
  - ○ Metastability and its removal (Synchronizers)
  - ○ Processor design (RISC and CISC)
  - ○ Hazards in digital circuits
  - ○ Advantages and disadvantages of synchronous and asynchronous sequential circuits
  - ○ Advantage of CMOS logic family over other logic families
  - ○ Significance of negative hold time and setup time.

Courses and Certification

Analog IC Design, VLSI Design, VLSI Architecture, Digital Design, Electronics Devices and Circuits.

Sector: ET

Name: *Manish Trigun(2020H1230255P)*
Company: Texas Instruments
Profile: Analog

Recruitment Procedure

- Resume Shortlisting (mostly CGPA > 7)
- There were three stages in the overall recruitment process: Written Examination, Technical Interview, HR Interview
- The topics covered in the written examination were:
  - General Aptitude
  - Digital Design (Flip Flops, Counters, Synchronous and Asynchronous circuit design, FSM, Combinational logic – Realization of functions using MUXES, Decoders, Encoders, Number Systems, etc). Better prepare questions from the DigiQ question bank.
  - RC, RL, RLC Circuits.
  - Network theory basics.
  - Basics of MOS Device Physics – MOS Capacitors, MOSFETS current ,voltage etc
  - Basics of Analog Electronics – Diodes, Rectifiers, Clippers and Clampers
  - STA based numericals
  - No Programming related questions were asked.
- Technical Interview:
  - Introduction – Give a brief introduction about yourself, where do you come from? What is your educational background? What are your interests (Technical Only)?
  - Questions related to Basics of CMOS Inverters. In one question they asked to draw a CMOS inverter schematic and then interchange NMOS and PMOS positions i.e NMOS connected to VDD and PMOS connected to ground.
  - Questions related to RLC circuits, RC filters, phase response, frequency response, op-amp.
  - One question was from FFT.
  - Whenever you are solving the problem given in the interview, make sure you clearly explain each step to the interviewer so that he could analyze your approach towards the problem.
- HR Interview:

○ Why do you want to join TI?
○ Location preference?
○ Salary Expectations?
○ What are your long term and Short-Term Goals?

Sources of Preparation

- Digital Design – Practice from DigiQ Question Bank. Refer to Gate preparation notes for theory.
- Analog Design – Practice Gate Questions. Refer to CMOS Analog Integrated Circuits by Razavi. Also revise concepts taught in AICD course.
- Verilog – NPTEL Lectures by Prof Indranail Sengupta
- STA, Clock Tree Synthesis – VLSI Physical Design Lectures by Prof. Indranail Sengupta, NPTEL
- Low Power Design Techniques - VLSI Physical Design Lectures by Prof. Indranail Sengupta, NPTEL
- Physical Design Flow – TeamVLSI blogs, RTL to GDSII lecture series by Dr Adi Teman on Youtube. Learn about different steps involved in Physical Design Flow, various file formats used in different stages.
- Metastability and Clock Domain Crossing – IEEE Papers.
- DFT, BIST, JTAG, ATPG - VLSI Physical Design Lectures by Prof. Indranail Sengupta, NPTEL
- VLSI Architecture (RISC preferably) – Classroom recordings by Prof Gurunarayanan.
- VLSI Design – Digital Integrated Circuits by Jan M Rabaey.

Other Relevant Information

- Explain the concepts with supporting examples and diagrams.
- Separate cut-offs for Analog and Digital section.
- Speed and accuracy both are important because written would be a little lengthy (Specially Analog section)
- Solve previous year questions of respective companies.
- Projects are super important.
- While solving a question, speak out your thought process and steps to the interviewer as he is more interested in your approach than your final answer.
- Strong basics is the key to clear the interview.

Sector: ET

Name: *Ritik Garg (2018A8PS0457P)*
Company: Texas Instruments
Profile: Digital

Recruitment Procedure

- Online Test, Technical Interview, HR Call
- Online Test:
  - The test had 3 sections – Analog, Digital and Aptitude.
  - The analog section had questions about op-amps, RLC Circuits and amplifiers.
  - The digital section mainly focused on concepts of digital design and ADVD.
  - Separate time was allotted for each section (45 + 45 +30) and once the time limit for a section was over, you couldn't review that section again.
  - The aptitude section was easy and no puzzles were asked.
  - There was also negative marking in the test.
- Technical Interview:
  - It began with me having to go through my resume and explain my projects briefly. I mentioned my ADVD assignment and the questions began from there.
  - I was asked three lines of questions – two from digital design and one from ADVD.
  - ADVD:
    - I was asked about a Static CMOS inverter.
    - What happens if we place the NMOS towards Vdd and PMOS towards the ground? What is the downside of having such a gate?
    - Can we build a single stage buffer using CMOS with rail to rail output swing; and so on.
  - Digital Design I: This set of questions was about universal gates.
    - What are universal gates?
    - Make an inverter with AND gates. Make an inverter with XOR gates. Make an AND gate with XOR gates? Why can it not be done?
  - Digital Design II: This set of questions began with a divide by 2 counters.
    - I was asked to make a divide by 2 counters using D flip flops.
    - Then I was asked to make a divide by 4 counters using D flip flops.

I made an asynchronous counter so I was then asked to make a synchronous counter.

- ■ I was then asked related questions about modifying certain things in the design and the corresponding output.
- ■ I was asked questions about setup time, hold time and so on. I was also asked some questions about Moore machines.

Sources of Preparation

- ● For all the subjects the course material is sufficient for preparation.
- ● One can look up static timing analysis on (http://www.vlsi-expert.com/p/static-timing-analysis.html).
- ● The textbook for digital design.
- ● Slides, Rabaey and Razavi for ADVD.
- ● For comparch I prepared using the course slides.

Courses and Certification

For digital profile, digital design and ADVD are by far the most important courses. Computer Architecture is a recommended elective and Verilog Is also required.

Other Relevant Information

- ● The test had separate cutoffs for analog and digital.
- ● The test was challenging.
- ● The thought process is what matters. Ensure they know what you're thinking and what approach you're taking currently.

Sector: ET

Name: *Shivika Gupta (2020H1230256P)*
Company: Texas Instruments
Profile: Digital Design Engineer

Recruitment Procedure

- Online Test, Technical Round, HR
- Cut Off: 7.5 CGPA
- Online Test had 3 sections:
    - Aptitude: It was pretty easy and straightforward. Questions came from quant, DI and LR.
    - Analog: Main topics were Opamps, RLC circuits, MOSFETs, etc.
    - Digital: had questions from counters, combinational logic, STA, CMOS inverter, etc.
    - Marking: 1 mark for correct answer, -0.5 for wrong. Accuracy is very important
- Technical interview:
    - He first asked me about the courses and the projects I have done and my favourite subjects.
    - He then gave me a STA problem and asked me to find out if there are any set up or hold violations. He kept on modifying the ckt and asked to check for violations and ways to fix them.
    - Then he gave a problem on FIFO memory and asked me to find the depth of the memory needed for the given problem. Initially, I had done it wrong, then he gave me hints so that I could reach the right answer.
    - Then he gave me an equation where one number, say A, is being multiplied by a constant and another number, say B, is being added to it. He asked me to design a combinational ckt when A and B both are one-bit numbers, then he asked me to design the ckt. when A and B are 6 bits.
    - The problem was not difficult but he wanted the optimal solution, and it took me a few attempts to reach the optimal design. The interviewers were impressed at the end.
    - These design problems could be done easily if you have done your projects well. The interviewers are friendly and they will give you hints and time to think. But you won't be able to catch their hints if you are not habitual to solving these types of problems.
- HR Round: It was merely a formality, he called and welcomed me to the TI family

and asked me where I lived and why I wanted to join TI, etc. It was only a 3 min call.

Sources of Preparation

- To be frank, I did not prepare anything specific for the drive as we only had a 15 days gap between end-sem and placements and were informed just 2 days before the written. Most of the things are covered in 1st year of M.E. so study during that time well.
- Revise STA concepts and read Rabaey for VLSI design about different combinational and sequential topologies and SRAM. One needs to be very thorough with CMOS.
- Practice some previous year GATE questions for written. For aptitude, you can practice questions from Indiabix or any other similar site.
- For Verilog, you may refer to Samir Palnitkar (a hands-on experience is a must).

Courses and Certification

Relevant courses are VLSI design, CAD for IC design, VLSI architecture, Verilog

Other Relevant Information

- Do your design projects and RP well. You will learn a lot while doing projects and it will improve your analytical and problem-solving skills which will help you get through the interview.
- Also, the interview happened in online mode, I used a pen tablet and shared my screen. This way the interviewers could clearly see the approach I used and the interview went on very comfortably. So, make sure you are equipped to present your solutions in the best way possible.

Sector: ET

Name: *Yash Jain (2018A3PS0333P)*
Company: Texas Instruments
Profile: Embedded Software Developer

Recruitment Procedure
- Online test, 2 rounds of Technical interviews, 1 HR round.
- Test had 2 sections: Marking scheme was +1/-0.5.
  - Aptitude: 20 problems in 30 mins. These required basic maths and logical reasoning skills.
  - Subject based section: 10 problems in 45 mins. Problems were based on basic OS concepts, C programming and some Microprocessor related theory as well. Accuracy was very important here.
- Technical Round 1: Duration- 1 hour 10 mins.
  - Find the minimum number of bit flips required to convert a number A to another number B. This required counting the number of set bits in XOR of A and B. They further asked an O(1) approach to count the set bits which required precalculation. They wanted the most memory efficient way to store these precomputed results.
  - Some questions related to my projects (mostly related to Team Anant). They connected these to some OS concepts.
  - Asked me about the work that I have done in Neural Networks. Went in detail about some of the topics that I mentioned in the project description.
- Technical Round 2: Duration- 1 hour.
  - Find whether two given rectangles overlap with each other. Write the code in C.
  - Find a way to multiply two numbers without using the '*' operator in C.
  - Find whether two strings are anagrams of each other.
  - Find the number of pairs in a sorted array that add up to the given target number.
  - Questions about Memory hierarchy, Why is it useful? What should a programmer keep in mind while writing a program knowing that the system uses memory hierarchy?
- HR Round: Duration- 10-15 mins.
  - Why do you want to join TI?
  - What motivates you to work?

Sources of Preparation

Strong C programming skill is essential along with a good grasp of OS fundamentals. For OS I would recommend the book 'Operating Systems: Three Easy Pieces'. And for C, one could practice some problems on online platforms like Leetcode. Extra focus should be given to bitwise operations.

Courses and Certification

Nothing required as such, Operating Systems could be useful. However one could easily study the relevant parts on their own.

Other Relevant Information

- Good projects in C could help.
- Knowledge about Computer Architecture might be useful, though not necessary.
- Electronics courses are not necessary, I didn't mention a single electronics course on my resume.
- Honestly tell them what you are comfortable with and what are your strong points.
- Ask for help/hints whenever you are stuck, they are there to help you.

Sector: ET

Name: *Yash Zavar (2020H1230237P)*
Company: Texas Instruments Inc.
Profile: Digital Design Engineer

Recruitment Procedure
- Written test: Analog section (20Q-45 min), Digital section(20Q-45min) and Aptitude (20Q-30min)
- Marking scheme: 1 mark for correct answer, -0.5 mark for incorrect answer
- Separate cutoffs for Digital and Analog section for Technical rounds in corresponding profiles
- Technical Rounds: Two (One each for Analog and Digital)
- HR Round: One Cutoff: 7.5

Sources of Preparation
- Analog section: 'Basic Electrical Circuits' by Nagendra Krishnapura , GATE notes for Analog Circuits and Network Theory Main topics: RLC circuits, GATE level Analog Design
- Digital Section: Jan Rabaey (Combinational and Sequential circuits),Sun Mo Kang (CMOS Inverter),GATE level Digital Electronics,'VLSI Physical Design' by Indraneil Sengupta Important Topics: Basic Digital Electronics, CMOS Inverter and Delay analysis, Static Timing Analysis (VLSI Expert),Complete VLSI Design Flow, Power Gating
- Aptitude: indiabix.com, Quantitative Aptitude by Arun Sharma (even RS Agrawal shall be sufficient)

Courses and Certification
VLSI Design, CAD for IC Design, Analog IC Design, VLSI Architecture, Reconfigurable Computing

Other Relevant Information

- Prepare well for the projects done during the M.E course since any question related to them can be expected.
- In case of confusion regarding any question asked, don't hesitate to ask if how you interpreted the question is what they asked.
- Opt for answering using diagrams and flowcharts instead of verbose answers whenever possible.

Sector: ET

Name: *Aakanksha Gujarathi (2020H1400181P)*
Company: Western Digital
Profile: Memory Design

Recruitment Procedure
- The process had one written Test, 4 Technical rounds, 1 HR round.
- **Written Test:**
  - The test consisted of 4 sections having 15 questions each: Aptitude, Digital, C programming and Circuit designing.
  - The test duration was 90 mins. The test was of moderate level.
- **Technical Round 1:**
  - Basic questions on VLSI and C programming were asked. Topics covered were working of NMOS, pinch-off voltage, malloc, call by reference, and call by value.
  - In the end, 2 puzzles were asked. The round lasted for 30 mins.
- **Technical Round 2:**
  - This round was focused on RC circuits, basics of capacitors, digital design.
  - Questions on charge distribution in a capacitor circuit, transient and steady-state analysis of RC circuits, and NAND/NOR-based implementation of circuits for a given input and output were asked. Questions on STA were asked.
  - This round lasted for 45 mins.
- **Technical round 3:**
  - This round was focused on designing combinational and sequential circuits. For combination circuits, the design of a 4 bit input multiplication with 20 and 257 was asked.
  - For sequential circuits, 3/4 questions on designing circuits based on input and output waveforms were asked. Basic questions on D and T ff were asked.
  - The interviewer asked me to explain the solution of a question based on the NMOS circuit which was asked in the written test. 3 puzzles were also asked. The round lasted for 1.5 hrs
- **Technical round 4:** In this round, the profile was explained to me. The interview lasted for 30 mins.
- **HR Round:** General HR questions were asked.

Sources of Preparation
- C programming: Geeksforgeeks
- Digital gate notes and Digital Design book by Morris Mano. VLSI design notes.
- CMOS Digital Integrated Circuits by Sung-Mo Kang and Yusuf Leblebici
- Gate notes for RC circuits, capacitor and transient and steady state analysis.
- VLSI-Expert for STA.
- Verilog HDL by Samir Palnitkar.

Courses and Certification
Control Systems, Network theory, Signal and Systems, Digital Circuits, VLSI Design with knowledge of STA, VLSI architecture, Knowledge on C programming are required.

Other Relevant Information
Basics of MOS physics, Flip flop, Latches, RC circuits, VLSI design, STA, C programming, Verilog are required. Prepare the projects well. There is a chance that the questions asked in written tests are discussed in interviews. Explain the thought process during solving the questions and puzzles.

Sector: ET

Name: *Amlan Prateek Acharya (2020H1230254P)*
Company: Western Digital
Profile: Memory Design

Recruitment Procedure
- Topics covered in the written exam were:
  - C programming (basic questions were asked)
  - Aptitude (topics covered were permutation & combination, probability, time and work, etc.)
  - Digital Circuits (Basic gate questions were asked in this section from logic gates, combinational and sequential circuits)
  - Analog Circuits (Basic gate questions were asked in this section from op-amp, diode applications, etc.)
- Interview Round 1:
  - The interviewer took interest in one of my projects and started asking me about the data flow and the various constraints.
  - The next question was also from one of my projects which was about RISC V architecture.
  - Some of the digital designing questions were asked since I showed my interest towards designing part (Here, the interviewer wants to check your approach though answering such questions will always add a plus point but she/he just wants to know where you really are heading in terms of approach)
  - Interviewer told me to write a basic Verilog code which checks if an 8-bit data incoming data is matching with the stored data or not and if it is matching, generates a high value.
- Interview Round 2
  - Interviewer asked me to explain what is priority encoder and normal encoder and asked me to write their Verilog code.
  - The second question was about the difference in synthesis of if -else statement and case statement in Verilog.
  - Then, the third question was mentioning all the possible corners to check whether an elevator is working properly or not for a three-storey building (focus on all the possible cases such as going from one floor to another, pressing more than one button simultaneously, operating switches outside of the elevator, etc.)

- - Fourth question was a puzzle question where I had three tanks of 12 litre, 8 litre and 5 litre and I was told to get 6 litre of milk using all these three tanks.
  - Interview Round 3:
    - The first question started with drawing a MOS transistor, CMOS gate and pass-transistor.
    - Second question was to implement a Boolean function using 4x1 MUX.
    - Third question was to implement a cube and square of a number using basic logic gates.
    - Fourth question was to write a testbench for an AND gate where I should check each and every input.
    - The round ends with basic puzzles which are not very difficult but you need to be careful about your answer.
  - HR round: The HR asked me to introduce myself and few general questions were asked.

Sources of Preparation
- Digital Circuits GATE previous year papers
- Analog Circuits GATE previous year papers
- STA from http://www.vlsi-expert.com/
- VLSI Design from Nitin Sir's lecture series, Rabaey, Kang and NPTEL.
- VLSI Architecture from Chandrashekhar and Gurunarayan sir lecture series
- CAD for IC Design from NPTEL and Asati Sir's lecture series.
- Clock Domain Crossing from https://anysilicon.com/ and https://www.eetimes.com/understanding-clock-domain-crossing-issues

Other Relevant Information
- Be thorough about your each and every project
- Have a complete understanding of all your subjects that you are planning to put on your resume.
- Go through a few other topics that I mentioned above.
- Try to be vocal about your approach in every problem since the interviewer can't see what you are writing but at least she/he must know where you really are heading.
- [NOT AT ALL MANDATORY] The interviewer was very pleased when I told them that I did a course in Python basics and Data structure which I guess added another plus point.

Sector: ET

Name: *Aneri Jain (2017B4A30759P)*
Company: Western Digital- SanDisk
Profile: ASIC

Recruitment Procedure
- Online Test:
  - Online MCQ based (+1, -0.25)
  - 4 Sections (Analog, Digital, C Programming, Aptitude), 15 Questions each
  - Time: 1.5 hrs.
  - Speed and Accuracy are important. I attended Digital, C, Aptitude sections first and then could do 50% of Analog in the remaining time.
- Interview Round 1 (40 minutes):
  - Some C programming questions on masking particular bits of an 8-bit number, dangling pointer, counting number of ones in 8-bit representation of a number, array traversal, reversing the number.
  - Questions based on my projects.
  - Digital design questions on four-bit multiplier, half adder circuit, about the programming languages known, RISC and CISC Architecture.
  - Basic C programming and strong digital design concepts were enough.
- Interview Round 2 (40 minutes):
  - It was mainly based on Verilog and digital design. Verilog module for D flip flop (most asked interview question), blocking and non-blocking assignment, FSMs, switch- case, tri state, shift logic, universal gates, XOR gate using Nand gate, XOR gate using multiplexer, difference between combinational and sequential, continuous, and procedural assignment, types of delay and a puzzle.
  - Revise the basic Verilog syntaxes very well. Keep sharing your approach while solving the puzzle.
- Round 3 (30 minutes):
  - Very few technical questions like RISC versus CISC, Ring and Johnson counter.
  - Other questions like why Western Digital, what is your passion, which team you want to join at WSD, why not IT, about programming languages known, what do you know about western digital.
  - Their main aim is to understand why you are here and your passion.

- HR Round (10 minutes):
  - Learning from interview experiences of TI, Qualcomm, Micron and previous rounds at WSD.
  - Extra curriculars, how did you manage your time with academics and extracurriculars, biggest teamwork example, strengths and weaknesses.
  - Their aim is to know you more and check if you can synchronize with WSD.

Sources of Preparation
- C Programming: https://www.youtube.com/watch?v=4OGMB4Fhh50&list=PLBlnK6fEyqRhX6r2uhhlubuF5Qextd CSM
- Digital Design: https://www.youtube.com/watch?v=HcH0khFGwS8&list=PLbRMhDVUMngfV8C6ElNAUaQQz0 6wEh
- ADVD:
  - https://www.youtube.com/watch?v=oL8SKNxEaHs&list=PLLy_2iUCG87Bdulp9brz9AcvW_TnF CUmM
  - http://www.vlsi-expert.com/p/static-timing-analysis.html (STA)
  - https://www.youtube.com/watch?v=ULDFB4J04fc&t=281s (FIFO)
- Microelectronics:
  - https://www.youtube.com/watch?v=yQDfVJzEymI&list=PLiDoPUX9nLkJ8dnPgKoVEOiAb8Bful KRR
  - https://www.youtube.com/watch?v=pK2elUcXWzs&list=PLO4mxQzfcml_56XSGcA8ULOv7qEt Zd0Hy
- Verilog: http://www.referencedesigner.com/tutorials/verilog/verilog_01.php
- Computer Architecture: Class Notes
- Operating Systems: Class Notes
- Analog Electronics: https://www.youtube.com/watch?v=kiiA6WTCQn0&list=PLwjK_iyK4LLDBB1E9MFbxGCEnm MMOAXOH
- Control Systems: https://www.youtube.com/watch?v=OOqgFE9SD4&list=PLUMWjy5jgHK3j74Z5Tq6Tso1fSfVW ZC8L
- Aptitude: http://www.indiabix.com/aptitude/questions-and-answers/
- Puzzles: https://www.geeksforgeeks.org/puzzles/

Courses and Certification

Digital Design, Microprocessors and Interfacing, Computer Architecture, Operating Systems, Analog & Digital VLSI Design, Analog Electronics, Microelectronics, Control Systems, Communication Systems

Other Relevant Information

- Never mention ML/ AI as your interests in an Electronics profile interview.
- Be confident while answering even if you feel you might be wrong. Create a vibe of the interview: Be interactive, and be loud and clear.
- Keep sharing your approach to solving problems with the interviewer. Do not panic if you don't know something, politely deny by saying that you do not remember at the moment.
- Be specific while mentioning your passion, be ready with reason for your every answer.
- Do not lose hope just keep trying your best and start your preparation timely at least before a month

Sector: ET

Name: *Anubhav Srivastava (2018A8PS0030P)*
Company: Western Digital (Sandisk)
Profile: ASIC

Recruitment Procedure
- Online Test, Technical Interviews, HR
- Test had 4 sections:
  - C-Programming: (15Q) In most questions, we had to tell the output of given code. One must have good knowledge till Structures and Linked list. Crucial differences between i++ and ++i and memory layout in C should also be known. I had not prepared it but it was better to prepare it.
  - Aptitude: (15Q) Aptitude was easy. However, one needs to be fast with solving questions.
  - Digital Design: (15Q) This is also easy with basic knowledge of gates, flip-flops, counters, FSM, memory/cache, Verilog, output waveform with gate delay, CMOS logic, voltage of nodes when MOS are connected in different configurations, TG and PTL logic. However, one must be fast with solving questions.
  - Analog: (15Q) RC circuits, finding UGB from Bode Plot and from a circuit, finding pole location from a circuit, switched capacitors charge sharing, opamps, CSA,CDA,CGA – their gain, input and output impedance, finding ICMR in a differential MOS topology. For me, these questions were tough because I did not have enough practice for these types of questions.
- Test was moderate. Test was 90 min long. Navigation between sections was allowed. It is better to start with the aptitude section because usually there is a minimum cut off for the aptitude and C programming section.
- I had a total of 4 interview rounds.
- Round 1 (Technical): (45 min)
  - It started with tell me about yourself.
  - Then, asked me: Difference between latch and flip-flop, write Verilog code for latch and flip-flop, questions on my project and challenges I faced (which I did in Comp Arch course), setup time and hold time, metastability, how delay on inverter is influenced by CL, Vdd, W/L.
- Round 2 (Technical): (45 min)
  - It started with do you have any questions about the difference in the profiles offered, Then, I was asked the following 2 puzzle questions.

- https://www.geeksforgeeks.org/two-poles-and-cable-puzzle/
- https://www.geeksforgeeks.org/puzzle-rat-and-poisonous-milk-bottles/
  - Difference between voltage and current (an unusual question!)
  - Make a 2:1 mux using NAND gate
  - Write a C code to find if the given number is prime.
- Round 3 (Technical + HR): (30 min)
  - Started with some HR type questions like where do you live, why WD and hobbies.
  - Then, asked me: Setup time and hold time, metastability, how inverter delay varies changing CL,Vdd,W/L, which parameter has more effect CL or W/L , Vout vs Vin characteristic of inverter, how current varies by changing W,L and gate thickness in MOS.
- Round 4 (HR): (20 min):
  - Tell me about your family background.
  - Have you displayed any leadership qualities
  - Higher studies plans
  - Any problem in relocating?
  - Why Western Digital?
  - Questions are easy but be prepared. Mainly they judge you by the way you are able to communicate your ideas.
  - All interviews happened on the same day.

Sources of Preparation
- Digital Design: Notes + slides
- ADVD: Notes
- Microelectronic circuits: Notes
- Analog Electronics: Notes + slides Control Systems: Basics like bode plots, transfer function
- Electrical Science:
  - RC, RL, LC, RLC circuits with step/ramp/impulse input, finding poles, zero transfer function in these circuits – This section is really important and intuitive analysis is required.
  - Moreover it is not taught in the ES course so I studied this from Chembiyan T YouTube channel (you can see lectures 15-23 from ES playlist: https://www.youtube.com/playlist?list=PL6qRG5-NfbLvagdQOwShX9FMrzb5hSvrq. If you have time you can watch more of its lectures from ES and MuE playlist).

Back to Contents

- Computer Architecture: Notes + slides. Verilog is very important.
- C-programming: Do questions from Geeksforgeeks
- There is some content on the drive. Seniors shall be adding more. :
  https://drive.google.com/drive/folders/1st1eTgOsZey5AuKaTkhKsjVsf69d0Msm?usp=sharing
- https://www.indiabix.com/aptitude/questions-and-answers/ - a good website for doing simple aptitude problems.

Courses and Certification

All of the projects I mentioned in my resume were part of course work. I interned at GAIL but it was related to instrumentation, so no questions were asked on it. Computer architecture (DEL) is very important, so take it in 3-2.

Other Relevant Information

- During the interviews be confident and speak out your thoughts even if you don't know the answer.
- If you don't know the answer, make the interviewer know that this is what you know and this is how you think it may relate to the final answer. The interviewer is looking at your approach to solving.
- Smile throughout the interview and try to keep the interview professional.
- Before you start your preparation, go through Placement Chronicles, and make a list of topics which are asked in tests and interviews. This will help in channelising your time effectively.
- Some companies don't have a separate HR interview, their technical round is mixed with HR questions. So, be prepared for HR questions so that you are not surprised.

Sector: ET.

Name: *Bhavya Kaushik (2020H1230244P)*
Company: Western Digital Sandisk
Profile: ASIC Team

Recruitment Procedure
- Written Test: There were four sections related to Aptitude (15 Questions), C Programming (15 Questions), Electronics and Digital Design (15 Questions) and Circuit Design (15 Questions). The duration of the test was 90 minutes.
- Marking Scheme: 1 Mark was awarded for every correct answer and 0.25 Mark was deducted for every wrong answer.
- There were Five Technical Rounds and an HR Round.
- Criteria: >=7 CGPA

Sources of Preparation
- Analog Electronics and Digital Electronics: GATE Notes
- VLSI Design:
    - Class notes and Lectures by Nitin Chaturvedi Sir.
    - CMOS Digital Integrated Circuits by Sung-Mo Kang and Yusuf Leblebici for CMOS Inverter
    - Digital Integrated Circuits: A design perspective by Jan M. Rabaey for Sequential and Combinational Circuits
    - CMOS VLSI Design by Weste for Delay.
- CAD for IC Design: Class notes and Lectures by Asati Sir.
- Analog IC Design:
    - Class notes and Lectures by Anu Gupta Ma'am.
    - Book: DESIGN OF ANALOG CMOS INTEGRATED CIRCUITS by Behzad Razavi
- Advanced Analog Mixed Signal Design:
    - Class notes and Lectures by Chandra Shekhar Sir.
    - Book: RF MICROELECTRONICS by Behzad Razavi
- Embedded System Design: Class notes and Lectures by Meetha Ma'am.
- Aptitude: Quantitative Aptitude by Arun Sharma (Level 1 questions) for the topics: Data Interpretation, Profit Loss, Speed time & Distance, Work, Probability, Permutation and Combination.

Courses and Certification

Analog IC Design, Advanced Analog Mixed Signal Design, VLSI Design, CAD for IC Design and Embedded System Design

Other Relevant Information

- Practicing to solve RC circuits intuitively is the key to crack interviews for Analog Circuit Designer.
- One can refer to the lectures by Professor Nagendra Krishnapura, IIT-M. (BasicElectricalCircuits - YouTube)
- Speed and accuracy are important for clearing the written test.
- While solving questions during interviews, speak as you solve. This will allow the interviewer to understand your thought process better.

Sector: ET

Name: *Deshpande Gayatri Santosh (2020H1400170P)*
Company: Western Digital
Profile: Memory Design

Recruitment Procedure

- Resume short listing, online test, technical interviews and one HR interview
- Resume shortlisted: CG cut-off 7
- The recruitment procedure for this company includes a written test, technical interview and HR interview. There were 4 interview rounds for me preceded by a written test. Interview rounds varied for each individual.
- **Online Test:**
  - The online test had four sections: aptitude (logical reasoning and mental ability),digital electronics , analog electronics and C programming.
  - The coding questions in the test were mainly MCQ-type – Find output of code.
  - Aptitude had questions from various sections like time ,work, distance , permutation and combination, etc.
  - Digital electronics questions were easy and similar to the GATE 1 mark pattern.
- **Technical Round (round 1):**
  - Projects
  - Hardware : MOSFET basics – Construction, working, regions of operations, pinch off voltage, etc
  - VLSI architecture based – MIPS, ARM architecture
  - Coding skill testing – C language (call by value, call by reference), assembly language related questions
  - Thinking ability – 1 puzzle was given
- **Technical Round (round 2):**
  - Projects
  - Explain Project in which you have worked on Software part
  - What subjects have you learnt in ME course and what are the outcomes of that?
  - Interviewer asked me about my technical interests
  - Previous job experience related questions
- **Technical Round (round 3):** Job role was explained and some technical questions
- **HR (round 4):**

     ○ Explain difficult situations you faced while leading a team and how you managed them
     ○ Why not Ph.D?
     ○ Why not other companies, why choose WD?
     ○ In the last interviews what mistakes did you make ?

Sources of Preparation

- For C programming: Geeksforgeeks (practice, topic-wise questions etc.), Indiabix
- Digital: GATE concepts, Previous year GATE questions
- Embedded Protocols - UART, Basic of emb.- https://electricalfundablog.com/communication-protocols-embedded-systems.
- Aptitude: Indiabix

Other Relevant Information

- Be confident in whichever topic you are studying and add it to your resume.It makes a lot of difference if you tell everything clearly mentioned in your resume.
- Go through basic stuff, especially C programming very nicely. Most interviews go around this.
- Make sure you know about the profile you are sitting for. Listen to placement talks, previous year company questions.

Sector: ET

Name: *Gautam Kailas Vikhe.*
Company: Western Digital
Profile: ASIC

Recruitment Procedure
- Resume Shortlisting, online test, 4 technical interviews and one HR interview
- Resume shortlisted on the basis of CG over 7.
- Written exam:
  - 4 sections: GA, C, Digital, Analog.
  - GA: Time and work, DI(lengthy), Speed and distance.
  - Questions on C
  - Analog: CMOS. Finding gain, input and output impedance expression of a given MOS based circuit.
- Technical Round 1: VLSI architecture -> Pipelining, hazards, RISC, CISC and questions related to RP, questions on compiler.
- Technical Round 2: Types of compiler, difference between C and Python (just brief points and not detailed).
- Technical Round 3: Mostly about what I was interested in, my passion and would I be willing to work in a profile that is not strictly related to Embedded. Basically checking if I am flexible enough.
- Technical Round 4: Questions on I2C, Timers, pointers, FPGA (what it is and its advantages), CSMA/CD, etc., peripherals of STM32 (just asked what all peripherals there are on it), questions on 32 bit FP divider (it was an assignment as part of RC subject).
- HR Round: Asked if I knew what the profile offered to me was and if I was ready to relocate to Bangalore.

Sources of Preparation
- Geeksforgeeks for C
- NPTEL lectures for STA.
- Programwiz for data structures.
- Meetha ma'am's notes for RTOS, ARM, STM32F4 controller.
- Prof. Gurunarayan VLSI arch lecs and memory lectures from vlsi design.
- IndiaBix for aptitude.

Other Relevant Information

- Don't be stressed or nervous during interviews. Most of the time, it happens that the panel members are friendly and help you out if you get stuck somewhere. They just see your approach towards the problem or question that they give you.
- Just keep your basic concepts of the subjects relevant to the job profiles clear. But also make sure you have a sound understanding of other subjects as well as questions at times may divert to any section. Be composed, calm and positive.

Sector: ET

Name: *Naren (2015HD400547P)*
Company: Western Digital
Profile: ASIC

Recruitment Procedure

- Written Test: There were 4 Sections (all MCQs): 1 Aptitude + 1 C Programming + 1 Digital Electronics + 1 Microelectronics) – Total time 1 hour 30 minutes. No section wise time limit.
  - Aptitude Section: Fairly straightforward. I had practiced a few random sets of aptitude questions which I found online. Almost all companies were asking the same kind of questions. The same was the case with WD.
  - C Programming: A quick and brief revision of basic DSA and solving some previously asked questions will help a lot. Some of the concepts learned in SES also came in handy.
  - Electronics and Digital Design: There were questions on basic DD and Verilog. I had taken RC in Sem I and felt that I had practiced everything necessary in this course. Revising DD concepts will be an added advantage.
  - Circuit Design: This section was on microelectronics. I answered whatever I could, but mostly I did not clear the cut-off for this section. Depending on the overall performance the company might decide to keep/not keep a sectional cut-off before proceeding to the interviews.
- Technical Interview: I had 4 rounds of Technical Interviews followed by 1 HR interview. Each round lasted 45 minutes and there was one interviewer in each round.
- In rounds 1-3, the interviewer asked me to give a brief introduction of myself, and then briefly explain my technical skill set and areas of interest.
- Following this, the interviewer asked me to explain one or two projects mentioned in the resume. The interviewer will try to go deep regarding what we did in the project, and what were the results obtained. So, it's important to be well versed with each point in the resume.
- Following this, the interviewer might ask questions to test our programming skills (easy moderate level – this will include embedded programming and basic C constructs such as linked lists, structures, unions, etc.). The embedded programming experience I had gained through ESD, and SES helped a lot in answering these questions.
- There were also some questions to test our understanding in the domain of the job

role. For me, the interviewers asked questions regarding RISC processors, Pipelining, Compilation Process, Control/Data/Structural hazards.

- In Round 4, the interviewer was the head of the ASIC team. He explained the job role in detail, the kind of work we would be doing, and the direction of progression. He wanted us to understand the job role and he wanted our opinion on whether we would be comfortable with it. So, this round was more a discussion than an interview and we must let the interviewer know how and why the JD is interesting to us. Paying attention to what he says is very important in this round.
- HR-Round: This round was about 10 minutes long. The HR asked simple questions about us, our technical interests, why we wanted to choose this JD, our background, and a few hobbies.

Sources of Preparation

- Coursework – RC, RTS, SES, ESD, VLSI Architecture.
- Projects – Thoroughly revise some good course projects/SOPs/DOPs/RP work/Competitions in the resume. It will help in having an interesting and engaging discussion with the interviewer.
- DSA – Basic knowledge and some programming experience in DSA will suffice.
- Various internet sources (Can google this) to practice aptitude Questions

Other Relevant Information

Thoroughly practice explaining the resume points with friends or oneself. Do revise/go through all the project reports and keep a good amount of solid content ready in your mind to engage the interviewer. Keeping interesting project topics and descriptions will surely grab their attention and then you can explain them thoroughly.

Sector: ET

Name: *Sayal Chawda (2020H1230240P)*
Company: Western Digital (WD)
Profile: ASIC

Recruitment Procedure
- Written test, 2 Technical interview,2 Manager interview,1 Hr interview.
- Written test had 4 sections:
    - Programming section: Questions based on pointers, structures were there.
    - Aptitude section: Moderate level aptitude was asked in this section.
    - Electronics: Basic digital electronics questions related to sequential circuits were there.
    - Circuits: Questions based on analog electronics were there.
- Test was moderate, if you don't solve many analog questions it's still fine. Time allotted for the test was 90 mins, you can solve any section in this time.
- First two rounds were based on digital electronics, electronic devices, and Verilog questions, which were of 45 mins and 30 mins respectively.
- Third and Fourth rounds were taken by managers so it was more like convincing them that I'm the right person for their team:
    - They asked me about my CAD for IC design project, RTL to GDSII flow, how I removed setup and hold margins in my design, what files I added in the SOC encounter, and a bit about what is inside those files.
    - So, if you want a backend ASIC profile you should know as much you can about your CAD project. It lasted for 40 mins.
- Final round was an HR interaction of about 10 mins.

Sources of Preparation
- Digital Design – Refer to Gate preparation notes.
- Verilog – NPTEL Lectures by Prof Indranil Sengupta, and compulsorily go through this http://www.asic.co.in/Index_files/verilog_interview_questions.htm
- STA – VLSI expert blogs and rabaey.
- Low Power Design Techniques - VLSI Physical Design Lectures by Prof. Indranil Sengupta, NPTEL
- Physical Design Flow – TeamVLSI blogs. Learn about different steps involved in

Physical Design Flow, various file formats used in different stages.
- Metastability, Clock Domain Crossing, synchronizers, FIFO, NAND NOR flash memories – Go through just basics about these topics.
- VLSI Architecture (RISC preferably) – Classroom recordings by Prof Gurunarayanan.
- VLSI Design – Digital Integrated Circuits by Jan M Rabaey.

Other Relevant Information
- This year ASIC and Memory Design profiles were offered by WD.
- Technical interviewers were more inclined towards C programming, but you can say that your expertise is digital electronics, Verilog so they will start asking questions on these topics.
- I used a tablet to show how I'm solving questions. Be interactive and confident, and hope for the best.

Domain:

IT

Sector: IT

Name: *Jainam Shah (2018A7PS0212P)*
Company: Accolite
Profile: Software Engineer

Recruitment Procedure
- 2 Online Tests:
  - First online test: Consists of 30 MCQs on C language and CS fundamentals.
  - Second online Test: 1 programming problem on their platform Codelyser.
- 3 Interviews.
- First Technical Interview: Asked 2 DSA questions to be solved on Hackerrank in front of the interviewer.
  - First question: Given a tree where each node was given a certain numeric value and an integer A. Print all the possible paths from root to leaf nodes where sum of values of nodes equal to A.
  - Second question: Rain water trapped from Interviewbit. https://www.interviewbit.com/problems/rain-water-trapped/
  - Then the interviewer asked some questions on DBMS like explaining ACID properties and some OS questions
- Second Technical Interview: Asked me to explain any one project. I have explained my Myntra internship project. One DSA question. Some questions on Java and OOP concepts like multithreading.
- HR round: Interviewer asked some general questions.

Sources of Preparation
Leetcode, Interviewbit, GeekforGeeks.

Sector: IT

Name: *Arshit Modi(2018A7PS0191P)*
Company: Amazon
Profile: Software Development Engineer

Recruitment Procedure

- Online Test - The test had 4 sections:
  - Code debugging (20 min) - 7 codes were given with the introduction of how they were supposed to work but had a few bugs in them. We had to find the bug and rectify it. The language of choice was asked before starting the section.
  - Coding test (70 min) – Questions were allotted from a database, so students got different sets of questions. Most of the questions were easy to medium and used the concept of trees, graphs, hash maps, maps, strings, custom sort, etc. There were 2 questions in this section.
  - Workstyles Assessment – This or that questions to judge on how the candidates perform in different scenarios.
  - Reasoning ability questions (35 min) - Easy mental ability questions like finding the next in the sequence, logical deduction, etc.
- Technical Rounds - 3 technical rounds were conducted for all candidates with elimination in each round.
- Round 1 -
  - The interviewer asked me to go through any one of the projects and asked me what all I learned out of it. Then straightaway started with the questions on DSA. In this round, I was asked these questions -
  - https://www.geeksforgeeks.org/connect-n-ropes-minimum-cost/
  - https://www.geeksforgeeks.org/minimum-halls-required-for-class-scheduling/
- Round 2 -
  - The interviewer asked me to introduce myself and then introduced himself. Then started with an easy DP question - https://www.geeksforgeeks.org/count-ways-reach-nth-stair-using-step-1-2-3/
  - Then after he was satisfied with my solution, he asked me the way to find the connection level between a user and myself on LinkedIn, which I solved using BFS. This round ended with 10 mins of resume grilling.
- Round 3 -

- ○ The interviewer told in the beginning about how he is interested in conducting the round. So he started with 3-4 behavioral questions like meeting the deadline and calculated risk ones. You can see more about these online.
- ○ Then he gave me one coding question - https://www.geeksforgeeks.org/word-ladder-length-of-shortest-chain-to-reach-a-target-word/

Sources of Preparation

Leetcode (primarily), GeeksForGeeks (Archives and last minute notes), PU Chronicles

Courses and Certification

DSA was a major focus and in-depth knowledge was required about it.

Other Relevant Information

- ● Amazon interviewers use a behavioral interview technique known as STAR. The interviewer is interested in the examples only from the projects that you undertook.
- ● You should be well prepared about anything and everything that you have written in your resume.
- ● The interviews were focused on your approach to the problem rather than the actual solution. So, it was very important to think out loud. Even if you don't end up with the right answer, the interviewer is more likely to judge you on the basis of your thought process.
- ● In one of my interviews, I was thinking out loud and I told one approach but then said that it wouldn't work. The interviewer then pointed out that I was thinking right, and I should ponder over it. So, COMMUNICATE WELL!
- ● Time complexity is very important! Be sure that you don't mess up in telling the time/space complexity of your solution. Getting it wrong is almost as bad as getting the solution wrong.

Good luck reader :)

Sector: IT

Name: *Gannu Atharvan (2018A7PS0278P)*
Company: Amazon
Profile: SDE 1

Recruitment Procedure
- Online Test, 3 Technical Interviews
- **Online Test:**
  - The test had 4 components with a separate time bound for each. Could switch between questions in each section but no free hand was given in switching between sections.
  - **Section 1:** Code debugging – 7 ques, 20 mins
  - **Section 2:** Coding – 2 ques, 70 mins (moderate level)
  - **Section 3:** Workstyle assessment – 20 mins
  - **Section 4:** Reasoning – 24 ques, 35 mins
  - Could choose the language we prefer in the code debugging round. The questions were simple, and all the test cases were passed for all the questions. I also solved both the coding questions, passing all the test cases.
  - It is better to spend enough time on the Workstyle assessment test, as it carries value too. The reasoning section was solvable in the given time.
  - I got shortlisted for the next round. There were nearly 20 students selected for the next round.
- Interview Round 1 (1hr10 min):
  - The interviewer introduced himself and asked me to do the same. The interviewer was very friendly. Then we moved to problem solving which involved two programming questions.
  - First question was a very basic question on string manipulation. There were many edge cases for it. The interviewer expected me to consider all such cases and code accordingly.
  - The next question was on minheap. We had to find out if the order of elements corresponds to a valid min heap, if not had to convert it to a valid one. I told him my approach and coded the same. Then he asked me to dry run the code for an input. I then realized that there is a small error in my code. I resolved it then he told me it is correct.
- Interview Round 2 (1hr 25 min):
  - The interviewer first asked me to introduce myself and then asked me to

describe one of my projects. Then we moved to problem solving which involved two programming questions.
  - The first question was, given a tree I was supposed to print from a start Node to end Node.
  - The next question was more like a question on Data Structures. I was given three abstract functions whose usage was specified. I had to choose an efficient way to store the data required with minimum time complexity.
- Interview Round 3 (45 min): The interview was taken by a person in a managerial position. He asked me about my projects in detail. Then I was given exactly 10 minutes to solve a question on 2-pointers.

Sources of Preparation

InterviewBit, Leetcode and interview archives on GFG. (Start your coding-problem solving practice on these sites as early as possible. It takes time to get a hang of solving coding questions.)

Courses and Certification

DSA, OOP, DBMS, OS, CN, ML

Other Relevant Information

- Don't focus only on writing correct code. It is important to let the interviewer know your approach. Don't be silent. Speak your mind, explain your approach along with the code.
- Do go through your resume and be prepared for cross-questions, make sure you have enough knowledge of the courses and domain in which you have done the project.
- Look at the past interview experiences of the particular company on Geeksforgeeks and prepare for the interviews accordingly. Looking at some experiences you will understand the pattern of interviews of each company, and this might prove to be very critical for last day preparations of the interviews.

Sector: IT

Name: *Jared Dominic Fernandez (2017B3A30588P)*
Company: Amazon
Profile: SDE

Recruitment Procedure

- Online Test, 3 Interview Rounds
- The online test consists of four components:
  - Code debugging section (20 minutes) - Fix buggy code so that it works according to the description given. You will be tested against a few test cases for this.
  - Coding test (70 minutes) - Two questions had to be solved in the allotted time, the difficulty level was Leetcode medium.
  - Workstyles assessment (20 minutes) - Scenario based questions were given to judge how you will respond to a given situation.
  - Reasoning ability section (35 minutes) - You have to solve 24 questions in the round. The important thing to note here is that you can't switch between questions, it can only be done sequentially.
- Three Interview rounds were conducted with elimination after every round.
  - Each round begins with the standard "Tell me about yourself" and then a discussion of the project done at your most recent internship.
  - If the interviewer sees anything else interesting in your resume, they are bound to ask about it, so be thorough with all points mentioned in your resume.
  - In each round I was given 2 DSA coding questions which had to be solved. The topic of the questions can be from anything really; It could be Graphs, Trees, Hashing, DP, String, Linked List, Monotonic Stack/Queue etc. While solving these questions, it is better to be verbal and communicate your approach with the interviewer.
  - Apart from this, they ask you some basic questions from OS and OOP.
  - The final round was a mix of Technical and HR, so apart from the technical questions I was asked some behavioral and situation based questions.
  - Another point I would like to mention (not specific to Amazon) is that many companies sometimes give you a scenario based technical issue and ask you what you would use to optimize it. Sometimes the answer to that is caching, in that case you might be asked to design an LRU or LFU cache, if they don't ask you to code it they will at least ask you the basic skeleton design.

- At the end of the interview, make sure you ask the interviewer questions about the company, their personal work or anything else you want. This goes to show that you are interested in the work of the company.

Sources of Preparation
Leetcode, Interviewbit, GeeksForGeeks

Courses and Certification
DSA, OOP, OS, ML

Other Relevant Information
- Even if you can't come up with the most optimal solution at the beginning, it is okay. Let the interview know what your current solution is and then build up to a better complexity.
- Be sure of the time and space complexity of your algorithm.
- Amazon interviewers use a behavioral interview technique known as STAR. You will be asked to describe a Situation you were in, Task you had to do, Actions you personally undertook in that situation and the Results you achieved from these actions.
- Here is an excerpt from the mail I got from Amazon the day before the interviews -
  The overview of the recruitment process is provided below. To Prepare and equip you better for the Interview process we strongly recommend that you go over it before your interview:
  The competencies that you will be evaluated on are: http://www.amazon.jobs/principles
  Amazon Interview tips for your preparation is available on:
  https://www.amazon.jobs/en/landing_pages/in-person-interview
  To know more about Amazon you may visit:
  https://www.amazon.jobs/en/working/working-amazon
  GOOD LUCK!

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Sector: IT

Name: *Amit Kumar Yadav (2020H1030124P)*
Company: Amdocs
Profile: Software Engineering Associate

Recruitment Procedure
- There were 3 rounds in the hiring process.
- Online Test (3 basic coding questions and some aptitude) -> 2hrs
- Technical Interview ->1 hr
- HR Interview ->15-20 min
- Technical round: Questions asked from the resume, asked everything mentioned in the resume, projects, skills, favorite subjects and work experience.
- Questions on Java, OOPs concept, one puzzle question, 1 coding question, some SQL and OS concepts.

Sources of Preparation
InterviewBit, GeeksforGeeks, Leetcode

Other Relevant Information
Try to prepare aptitude alongside coding and subject preparation, also solve puzzles from GFG.

BITS Pilani

Pilani Campus

Sector: IT

Name: *Aniket Rajdev Mourya (2020H1120298P)*
Company: Amdocs
Profile: Software Engineering Associate

Recruitment Procedure

- There were 3 rounds in the hiring process: Online test followed by technical interview and the HR interview.
- Online test:
    - Consisted of Aptitude (Visual Reasoning, Quant, Puzzles, Logical Reasoning), technical, coding and verbal ability.
    - The coding questions were easy to medium one.
    - There was a choice for a programming language Java and CPP. Choose as per your preference. The online test round was around 2hr.
- There was one technical round in which projects were discussed. OOPS and DBMS concepts were asked. I was asked to write an approach/code in the code editor. Some SQL queries were also asked. The technical round was around 50 min.
- After technical the HR round was conducted. In this some behavioral questions were asked, your projects, interest, strength/weakness, etc. The HR round was about 15 to 20 min.

Sources of Preparation

- For technical interviews – Leetcode easy to medium level questions, Interviewbit, GFG.
- For CS subjects like OOPs, DBMS, DSA prepare from Interviewbit interview questions, GATE CS notes, GFG.

Courses and Certification
DSA, OOPs

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Other Relevant Information

- Answer confidently every question and keep a healthy communication.
- Try to ask some questions at the end of the interview. Do research in advance about the company, the technologies they are currently working on, their mission and vision, etc.

Sector: IT

Name: *Koushik Rout (2020H1120265P)*
Company: Amdocs
Profile: Software Engineer

Recruitment Procedure

- The process consists of three rounds: aptitude, technical and HR round.
- The aptitude section consists of problems involving speed, time and distance , mixture and alligation and reasoning.
- Technical questions are related to data structures, algorithms, and input-output problems. Coding consists of three questions. All questions are of easy and medium difficulty level.
- The interview round starts with details of the project mentioned in the resume. Then some questions about basics of operating system, dbms, oops. Two coding questions are given to code on ide. Questions are of easy level.

Sources of Preparation

Leetcode easy and medium problems.

Sector: IT

Name: *Mohit Shukla (2020H1120295P)*
Company: Amdocs
Profile: Software Engineer

Recruitment Procedure
- The process consists of three rounds: aptitude, technical and HR round.
- The aptitude section consists of problems involving speed, time and distance, mixture and alligation and reasoning.
- Technical questions are related to data structures, algorithms, and input-output problems. Coding consists of three questions. All questions are of easy and medium difficulty level.
- The interview round starts with details of the project mentioned in the resume. Then some questions about basics of operating system, dbms, oops. Two coding questions are given to code on IDE. Questions are of easy level.

Sources of Preparation
Leetcode easy and medium problems.

Sector: IT

Name: *P Harshith Bhargav (2020H1120274P)*
Company: Amdocs
Profile: Associate Software Engineer

Recruitment Procedure
- Online Test, Technical Round and HR Round.
- Online Test: It was 2 hours in duration. Aptitude, CS fundamentals were tested in the 1st hour. In the next hour we had to solve 3 coding questions which tested fundamental programming skills.
- Technical Round: This interview round was mainly based on the things that were mentioned on my resume.
  - I had a project on Spring boot, for a major part of the interview I was answering questions related to the project, how we came about it? How does the code work? Object oriented concepts and design patterns used in the same.
  - Then I was asked basic SQL concepts and what I knew about the concurrency. Then I was given a recursion question to solve which was based on the Fibonacci sequence.
  - The interview went for around 1 hour and there were 2 interviewers.
- Tip: If you do not know the answer or feel stuck, tell the interviewer/s clearly the approach you are trying to get to the answer, they will help you out. Do not answer just based on the hunch. Having knowledge of OOPS and Spring boot will help.
- HR Round: This round was based on Questions like Education background, why Amdocs? What do you know about Amdocs? Weakness and Strength. What are you doing to overcome your Weakness?
- Tip: Attend the Pre-Placement Talk (PPT) and understand the company profile, it will help you a lot in this round.

Sources of Preparation:
GFG and Leetcode100 for coding questions. GATE notes/ GFG notes for CS fundamentals. Indiabix for Aptitude practice.

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Other Relevant Information:

- If you are preparing for IT Companies do not ignore practicing aptitude. Solving a few questions from the topics you do not feel comfortable with on indiabix will help you a lot for MCQ online test.
- You can identify your weak topics by giving a couple of sample tests and writing down the topics you are not able to answer at all or mostly. Then go to those topics and solve 5-6 questions from each topic for a couple of days, then again give the sample test and see if you are improving. Continue this loop till you can get almost all correct.
- Having a good project on your resume can help you a lot in the technical round, make sure you revise the project before appearing for the interview.

Sector: IT

Name: *Pandya Parth (2020H1120287P)*
Company: Amdocs
Profile: Software Engineering Associate

Recruitment Procedure
- 2 hr online test consisting of 3 coding questions and some technical + aptitude MCQs.
- Non-elimination psychometric test. Personality based questions
- One technical interview and one HR interview on the same day.

Sources of Preparation
- GFG is a must-do for coding.
- If you are coding in Java then Anuj bhaiyas DSA 1 course from Youtube. Prepare a collection framework.
- Prepare DBMS, OS very well and for CN Only basic knowledge will do. I prepared DBMS from tutorials point lecture series. OS and CN from GFG.

Other Relevant Information
Personality tests sometimes contain repeated questions to test your true personality so take care about that.

Sector: IT

Name: *Suyash Musalgaonkar (2020H1030127P)*
Company: Amdocs
Profile: Software Engineering Associate

Recruitment Procedure
- There was an online test of 2 hrs which consisted of MCQ based questions covering CS fundamentals, aptitude and Java. Also there were 3 coding questions of easy difficulty.
- After the online test there were two rounds of interviews, technical and HR.
- Technical round discussion revolved around Java, OS, and a very basic coding question.
- Questions:
  - What functionalities does the OS kernel provide?
  - Difference between runtime and compile time polymorphism and how it works in Java.
  - Difference between Stacks, Queues, Linked List.
  - What are collection interfaces and what are the classes that implement those interfaces.
  - Scheduling algorithms in OSystem.
  - Thread Safety of StringBuffer and StringBuilder Class in Java.
  - Lastly, a brief discussion on my projects.
- HR Round : 15 minutes.
  - Started with a basic introduction and was asked how I performed in the previous round.
  - Explain failure faced in life and how you dealt with it.
  - Why Amdocs?
  - Weaknesses as well as Strengths.

Sources of Preparation
- GeeksforGeeks, Striver's Sheet (around 200 DSA questions)
- CS fundamentals: GATE preparation notes would suffice.

Courses and Certification

No courses or certifications were required as such but make sure to focus on the skills written in job description

Other Relevant Information

- Be thorough with whatever is mentioned in the resume.
- Research about the company and make sure to check out the archives available at GFG, it helps a lot in speeding up the preparation when an interview is coming up
- Be polite and try to engage with the interviewer.

Sector: IT

Name: *Vijay Malik (2020H1120304P)*
Company: Amdocs
Profile: Software Engineer Associate

Recruitment Procedure

- The process consists of three rounds: aptitude, technical and HR round. The aptitude section consists of problems involving speed, time and distance , mixture and alligation and reasoning.
- Technical questions are related to data structures, algorithms, and input-output problems. Coding consists of three questions. All questions are of easy and medium difficulty level.
- The interview round starts with details of the project mentioned in the resume. Then some questions about basics of operating system, dbms, oops. Two coding questions are given to code on IDE. Questions are of easy level.

Sources of Preparation

GFG problems. C by Dennis Ritchie. Java complete reference. Aptitude by RS Aggarwal.

Sector: IT

Name: *V Kiran Kumar Reddy (2020H1120277P)*
Company: Amdocs
Profile: Software Engineering Associate

Recruitment Procedure

- The recruitment process consists of 1 Online Test, followed by 1 psychometric test and then interviews.
- The online test was conducted on the Hirepro platform and it consisted of MCQs and 3 coding questions and the duration of the test was 2 hrs. MCQs were from aptitude, Technical, verbal and Coding questions were basic.
- Technical Round : 1 hour Basic Introduction on the Project.
  - Basic coding question : Sort Array without library
  - Custom Comparator, how java internally sorts.
  - Java OOPs concepts, talked in detail.
  - OS and ADA standard questions.
  - Java development questions on project
- HR Round : 15 minutes
  - Started with a basic introduction and was asked how I performed in previous rounds.
  - Some Scenario based hypothetical questions.
  - Explain failure faced in life and how you dealt with it.
  - Instance of negative Feedback and how you reacted to it.
  - Weakness and how do you overcome it

Sources of Preparation

- For coding questions I preferred Interviewbit, Leetcode and GFG.
- For technical subjects OS, DBMS, CN and ADA revise GATE notes. Additionally practice interviews asked questions from the interview bit, GFG

Other Relevant Information

- Be thorough with whatever is mentioned in the resume.
- Focus on hacking the problem rather than finding optimal solutions in interviews.
- Research about the company and its past interview experience from GFG, Glassdoor etc.
- Be polite and try to engage with the interviewer.

Sector: IT

Name: *Abhigyan Borah (2020H1120288P)*
Company: Cisco Systems
Profile: Software Engineer

Recruitment Procedure

- Online Test, Technical Interview, Managerial Interview, HR Interview, Final HR Interview
- Online Test:
    - The online test has MCQs and two coding questions
    - MCQs were based on CS fundamentals
    - Coding questions were based on creative usage of data structures around strings.
    - One of the questions was simple but the other had certain edge cases that were tricky to handle. The harder question primarily tested the students on how well versed they were on data structures and the ability to detect edge cases.
    - The MCQs were easy in the online test, however it is very essential to keep track of time while solving the coding questions.
- Technical Interview (Round 1):
    - Tell me about yourself
    - Basic networking questions (as my resume highlighted experiences on computer networks)
    - What is your preferred programming language and why?
    - Basic coding question
    - Tricky coding question on validating if an input string was an IPv4 address or not
    - Questions about machine learning (as I mentioned a machine learning based project in my resume)
    - Questions about teamwork and tricky situations
    - The coding question basically tested the ability to find out edge cases that would have broken the program. The interviewer was extremely helpful and friendly, and guided me through the process of finding edge cases in my program.
- Managerial Interview (Round 2):
    - Tell me about yourself
    - Questions on project based on computer networking

- Questions about teamwork and tricky situations
- Brief discussion on the skills I mentioned in my resume
- Questions about hobbies (we had a lovely conversation about it and I was told about how such things are supported in CISCO's workplace as it is good to have such hobbies)
- A small tricky question just for fun
- This was my favorite interview as the interviewer was very friendly and jolly. I talked to him as if he was someone I know (though I stayed within my limits to not get too informal) and it was an absolute pleasure.
- HR Interview (Round 3):
  - The trickiest "Tell us about yourself" question was, "Tell me about yourself without mentioning any personal details, what you are doing, and what you have done. I want to know who you actually are."
  - Questions on projects and purpose of projects
  - Questions on how flexible you are and how well will you fit in any department
  - Questions about teamwork and tricky situations
  - A tricky question that tested cognitive skills
  - This was in my opinion the toughest interview out of the three as I had to defend my projects. Apart from that, the "Tell us about yourself" question really moved me.
- Final HR Interview/Briefing about the compensation and benefits (Round 4):
  - What are your expectations about the role you are applying?
  - Why CISCO?
  - Questions on location preference and me being available for PS and night shifts
  - Summary of the compensation and other facilities
  - This was the shortest interview and it just checked my purpose for joining the company and if I was enthusiastic about it.
  - The only advice from me would be to be good at communication skills. It is like a boat and the interview is like the ocean. If it is strong, it will carry you throughout the interviews.

Sources of Preparation
- InterviewBit programming section for programming practice
- GeeksforGeeks puzzles section for exercising creative thinking and problem solving

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- InterviewBit subject wise Interview Questions for OS, DBMS, Computer Networks (for quick recap of CS fundamentals)
- Mock interviews with friends
- To improve at my preferred programming language I worked on a project along with a few friends of mine.
- Apart from all the above-mentioned sources, I went through my GATE notes for Computer Networks to quickly revise the essential concepts and to fill in whatever I forgot.

Courses and Certification

I have not done any courses and certifications prior to CISCO tests and Interviews.

Other Relevant Information

- I did my best to be clear about the fundamentals of CS and in becoming a very good problem solver, and in learning my preferred programming language well.
- Apart from technical skills, practicing soft skills is a must, especially the ability to carry an exciting conversation. Knowing how to talk to people, keeping a conversation lively, and being perceived as an energetic person is essential.

Sector: IT

Name: *Kamal K. Agarwal (2020H1120286P)*
Company: Cisco Systems
Profile: Software Engineer – Cloud Application Development

Recruitment Procedure
- Round 1 (Online Test):
  - This HackerRank test consisted of 15 MCQs and 2 coding questions which had to be solved within 60 minutes.
  - The MCQs were mainly based on CS fundamentals consisting of computer networks, DBMS, and Operating Systems, and few questions were related to bit manipulations. Solving previous year GATE 1 mark Technical MCQ's were enough to do well in it.
  - Also 4-5 questions were on HTTP header.
- Round 2 (Tech Interview 1): After a brief introduction I jumped to different projects mentioned in the resume.
  - Asked about what all sorting algorithms I know and what are time complexities of each of them.
  - An easy programming question was also asked "Finding index of pair summing up to given K".
  - How TCP/IP works?
  - Then a little bit more about projects such as motivation for these.
- Round 3 (Tech Interview 2):
  - This round was with a Principal Engineer at Cisco; first he introduced himself and then proceeded to interview me with a basic introduction.
  - This round was focused on covering each bit of resume and behavioral aspect.
  - As I had mentioned Cloud Computing as one the subject and project, so he proceeded with that first.
    - How does virtualization work?
    - Different types of Virtualization?
    - How logical layers are arranged while having virtualization?
    - Hypervisor and example of any Hypervisor used?
  - For the next part as I had mentioned Java he smoothly shifted focus to it
    - What is semaphore?
    - How does it work in an environment of Threads?
    - How can we implement these using JAVA?

- ■ Abstraction vs. Encapsulation? (with an example to real world)
- ■ What is Dependency Injection ?(As I had a project using Spring Framework)
- ■ What is Polymorphism?
- ■ There was a question similar to the Singleton design pattern. (use and How does it work)
- Then he forwarded on to ask a behavioral question by asking me about the time when you faced difficulty in doing your work and how you overcame it.
- Round 4 (Managerial Round 3): Interviewer was in bit of a hurry and simply told me that I am not here to test your technical competencies but to test your cultural fit for Cisco
  - ○ As I had volunteer experience with RHA he asked for motivation to go for it.
  - ○ What are your strengths? (prepare at least 2 strengths)
  - ○ What motivates you?
  - ○ Tell something you did from scratch?
  - ○ Why do you want to join Cisco?
  - ○ Why did you choose courses mentioned in your resume?
- Round 5 (HR Round): It was just for brief overview of job role but he did ask me a number of behavioral questions also
  - ○ Introduce yourself?
  - ○ Do you know which job role you are being interviewed for?
  - ○ Responsibility for that role?
  - ○ Would you be able to carry out those responsibilities? (a brief justification)
  - ○ What do you know about Cisco and its competitors?
  - ○ Then he just proceeded on to explain Salary structure and asked for a preferred location.

Other Relevant Information

Resume should have things for which you are very comfortable. Have an enthusiasm for the job role and show good aptitude to learn new things. Most important is preparing a behavioural question which tells a lot about you.

Sector: IT

Name: *Mudit Shivendra (2018A8PS0524P)*
Company: Cisco Systems India Pvt. Ltd.
Profile: Software Engineer – Network/Embedded/Application Development

Recruitment Procedure

- Coding Round:Two Coding questions (1 easy and 1 medium) and 15 MCQs related to CS fundamentals and aptitude. Had to solve both coding questions to get shortlisted for further rounds.
- Round 1 – Technical Round:
  - The interviewer was a BITSian Alumni only and we had a little chit chat about campus and online semesters.
  - Then he asked about basics in DSA like creating a data structure which is the best substitute for maps and we have to use that data structure to predict growth trends of various student categories in BITS.
  - A few basic questions related to linked lists and binary trees were asked. Then he asked basic OOP questions, mainly about the main principles in OOP, a little about threads and processes (switched to operating systems as well).
- Round 2 – Technical Round: Basics of C++ were asked like function pointers, virtual function, memory allotment on object creation etc. Then a few questions related to computer networks were asked.
- Round 3 – Manager Round: In-depth resume discussion and then a few questions related to future plans and goals
- Round 4 – HR Round: Was asked a little about Cisco and then the location and role preferences.

Sources of Preparation

Geeks for Geeks + Leetcode would be the best way in my opinion to go about preparing for the coding rounds and further interview DSA questions.

Other Relevant Information

I knew that Cisco has a history of asking questions related to computer networks so just gave a quick look at top interview questions on computer networks on GFG. Don't forget

to revise the CS fundamentals before the interview. Be confident and relaxed, you'll perform much better in interviews.

Sector: IT

Name: *Shreyas Bhat Kera (2018A7PS1119P)*
Company: Cisco Systems
Profile: Software Engineer

Recruitment Procedure

- Online Test: 15-16 MCQs on CS theory questions on Computer Networks, DSA and Operating Systems. 2 coding questions based on strings (1 easy, 1 medium). I was able to solve both in time.
- 1st Technical Interview: I had two panelists, (senior engineer and junior engineer).
  - Started with introductions, then moved to my projects.
  - I was asked some questions about Docker, since I had mentioned it in my resume (what is Docker, how does it work, why would you use Docker).
  - I was asked some basic questions on Computer Networks (explain Transport Layer, TCP vs UDP) and OS (Mutex vs Semaphore).
  - I was asked to solve some coding programming languages in any language and the editor I preferred (I asked if Python was fine and they allowed it). Since I mentioned Python, he asked what all differences I could think between Python and Java.
  - First was an easy palindrome question (https://www.geeksforgeeks.org/check-characters-given-string-can-rearranged-form-palindrome/), which had to run on some test cases.
  - Second, they asked how I could modify the nodes of a tree so that I could perform level order traversal (left to right or right to left) without a queue, only basic code was needed.
  - Third they asked a graph question similar to https://leetcode.com/problems/course-schedule/ .
  - Code wasn't needed; they just wanted to check if I knew the concept of topological sort.
  - Time and space complexities were also discussed for the problems.
  - Finally, they asked some questions on neural networks since I had mentioned them in the resume.
  - This round was 1 hour long.
- Managerial Round:
  - In-depth questions about my projects, the exact problem statements, the challenges, the way I resolved difficult problems, etc.
  - Majority of the time was spent on this. Asked about OSI model, especially

the difference between Physical and Data Link Layers.
- ○ Other questions included what is virtual memory, swapping, difference between GPU and CPU, what is CUDA.
- ○ He was particularly interested in my IoT project, since his domain was IoT.
- ○ Round lasted for 45 minutes.
- 2nd Technical Round: Was asked in-depth problems about my projects again, especially about concepts I had used in my projects.
- ○ He asked what is bias, variance, how can you correct overfitting, explain any simple ML algorithm, describe circumstances where you would or wouldn't use an ML algo (all these questions were probably only asked since I had mentioned ML in my resume.)
- ○ He asked some basic Network and OS questions too. Finally he asked me to code a solution to a tree problem and run it for some cases
- ○ (https://www.geeksforgeeks.org/check-if-a-binary-tree-is-subtree-of-another-binary-tree/). This round lasted 1 hour
- HR round: Only lasted 10 minutes and asked questions about my location preference and whether I had plans for Masters.

Sources of Preparation
- Mainly Geeksforgeeks and Leetcode for DSA problems (arrays, linked lists, trees, graphs, bit magic, DP)
- Revising basic concepts of OOP, Networks, OS, DBMS from course slides or online

Courses and Certification
I had some Coursera certifications but they were not really relevant.

Other Relevant Information

- Be ready to talk in-depth about your projects and answer cross-questions from interviewers about the technologies you have used in your projects.
- Go through CS fundamentals once before interviews, at least the basic commonly asked questions. It's better to let the interviewer know you can't recall some topic rather than equivocating.
- Do a little research about the company, so you can answer well about why you want to join the company. Being curious and asking questions about the company also shows your interest.
- Try to be interactive during the interviews, and keep explaining your approach because that's what they want to test.
- Be very fluent in DSA and start preparing well in advance, it's the main topic that every company will ask you for. Most of all don't get demotivated, something will work out. Good luck!

Sector: IT/ET

Name: *Soumyadeep Bose (2020H1240099P)*
Company: CISCO
Profile: Software Engineer (Network/Embedded)

Recruitment Procedure
- Round 1 : Online Exam
  - Exam was of 1 hour duration.
  - The first section had 15 Aptitude questions along with basic concepts of OS and Computer Networks.
  - The second section had 2 coding questions of moderate to hard difficulty.
- Round 2 : Technical Interview
  - Interview went for around 68 minutes.
  - Started with the extra-curricular activities and my hobbies.
  - Moved on to my ME projects : what all innovated me to choose the topics!
  - Networking concepts : Classful vs Classless Addressing, Routing Protocols.
  - How is 5G the most happening thing right now ?
  - Basics on Fourier transform and convolution.
  - Advanced question : How to mitigate the timing issues that arrive while we communicate during online presentations ? Explain with respect to Networking concepts.
  - What are all coding languages I am acquainted with ?
  - Difference between procedural and object oriented programming.
  - Coding question : How can you detect a loop in a linked list.
- Round 3 : Managerial Interview
  - Continued for approximately 37 minutes.
  - Introduce yourself.
  - Explain a situation where you failed initially but made a comeback.
  - Explain the signal processing project.
  - What is phase estimation and mask estimation ?
  - Was asked if I had any experience being the team leader.
  - What are my strengths and weaknesses?
  - What programming languages do you know ?
  - Name any CISCO developed protocol and its function.
  - Why CISCO ?
- Round 4 : Executive Interview

- This round continued for about 45 minutes.
- How did you manage time to study OS and networking apart from the course curriculum ?
- What do you understand about Operating systems and its types ?
- What do you understand by routing ?
- Difference between the various routing protocols.
- What do you understand by paging and segmentation ?
- What programming languages do you know ?
- How much do you rate yourself in Python out of 10 ?
- How did you approach the coding question in the written round ?
- What is meant by free() function in C ? How is it associated with the OS ?
- Garbage Collection in Java.
- Explain the OSI model in Networking.
- What do you understand by authentication and authorization ?
- What do you understand about LMI ?
- Mention and explain one of the recent works in progress in CISCO.
- Round 3 : HR Interview
  - Asked whether I am okay with relocating in Bangalore or Pune or Chennai and what are your location preferences out of these in order ?
  - Are you interested in Higher Studies ?
  - Are you available for PS2 from January to June in 2022 ?
  - Can you work in shifts ?
  - How many days will you be available in the week ?
  - Asked whether I had any published work.

Sources of Preparation
- Geeks for Geeks must-do-coding problems on arrays, string and linked lists.
- Basic C programming from Naresh IT and mycodeschool channels in Youtube for basic understanding of Data structures.
- Be thorough with your projects.
- Gatesmashers youtube channel for OS and Computer Networks.
- Ravindrababu Ravula for advanced topics in OS and Computer Networks.
- Go through the basics of RTOS.
- Communication concepts from class notes will suffice.
- 5G concepts from ShareTechNote website.
- VLSI design concepts from class notes.
- Revise digital concepts from GATE notes.

Courses and Certification

- CCNA certification will boost your selection although not mandatory. (I didn't have one).
- Data Structures and algorithms.
- CN and OS if possible. None of these are mandatory.

Other Relevant Information

- Keep your basics absolutely clear and crisp.
- Try to explain the answers confidently.
- Think twice before answering any tricky question.
- Explain how you would like to explore more such concepts in the upcoming future.
- Focus on your communication skills.
- Try to emphasize on your hobbies and areas of interest as well.
- Interviewers were very friendly and they will guide you every time you face any difficulty. Share your problems so that they can help you out if you're stuck. And go with the flow. All the best !!!

Sector: IT

Name: *Supratik Bhattacharya (2017B2A70745P)*
Company: Cisco Systems
Profile: Software Engineer

Recruitment Procedure
- Online Test, Technical Interview-1, Interview-2, Interview-3, HR Round
- The online test was of 1 hour and was conducted in Hackerrank consisted of two parts:
  - MCQs on CS Subjects: Computer Networks, Data Structures and Algorithms and Database Systems. It also had C output-based questions.
  - There were two coding questions. At least one needed to be solved completely. One of them is this: https://leetcode.com/problems/expressive-words/ .
- Technical Interview – 1: Interview was solely based on CS theory subjects, particularly computer networks.
- Interview-2: The interviewer asked to explain to me about my work in my previous internships and discuss my project.
- Interview-3: This round focused on behavioural questions based on my volunteering experience in my resume.
- HR Round: Lasted only 6 minutes, only questions asked were about my location preference and information about a clause (This time anyone who took an offer at CISCO and took PS was asked to do PS at CISCO itself (this condition didn't apply in case one takes thesis instead)).

Sources of Preparation
- Leetcode, Interviewbit and GeeksforGeeks.
- Try to complete every question from Interviewbit.
- Leetcode is great but has a greater number of questions so plan your time accordingly if you choose to stick with Leetcode.
- Use GeeksforGeeks for reading the previous interview experiences about a specific company.
- Also, use Leetcode to discuss the interview experience section as well. Leetcode Discuss tends to feature various good coding templates for countering specific

types of coding questions.
- For Computer Networks, I relied on GeeksforGeeks and some YouTube channels.
- For OOP basics, BITS Course Slides seem to be sufficient. Also, while doing an OOP course at BITS, I took the Object oriented design part seriously, I could not clear an Interview for another company because I didn't know this part well.
- For Operating Systems, again, class notes from the BITS course helped also refer GeeksforGeeks for the same.
- Also, for certain classic coding questions with difficult to understand approaches, I referred to YouTube channels like: Backtobackswe, Abdul Bari and Tushar Roy.

Courses and Certification

Courses: Data Structures and Algorithms, Operating Systems, Computer Networks, Object Oriented Programming. No certifications needed as such because most companies tend to ask Coding Questions and then CS theory subjects.

Other Relevant Information

- Whenever you make your resume, only include those points which you will be able to explain well when the interviewer asks you to do.
- Most technical interviews are not obsessed about too many projects. Even a single good project shall be fine.
- For most Day-1 companies, your practice on Leetcode/Interviewbit will be the most helpful.
- In most online tests, solving the coding question has way higher weightage than MCQs. Also, please note that in case you are able to solve all the questions, try to submit the answers fast after double checking if all the testcases are passing.
- From my personal experience, I was able to solve all the questions in one company and 2.5/3 questions in another company and still didn't get shortlisted for interviews, because, maybe I took more time to solve than the others.So, speed of solving the problem is also very important.
- While solving any coding question in the interview, explain your thought process aloud. To anyone reading this I wish you all the best for interviews!

Sector: IT

Name: *Aayush Yadav (2020H1030143P)*
Company: Citrix
Profile: Software Engineer

Recruitment Procedure
- Online Test:
  - Section 1 of the test consisted of 40 Multiple Choice Questions timed for 60 minutes. There was no negative marking.
  - Section 2 of the test consisted of 2 programming questions timed for 60 minutes.
  - The test was conducted on Hackerrank platform.
- Interview:
  - Technical Round 1: Some questions on CS fundamentals and a coding question. It lasted for around 50 minutes
    https://www.geeksforgeeks.org/count-of-ways-to-split-a-given-number-into-prime-segments/
  - Technical Round 2: In depth discussion on projects and previous work experience. Some CS fundamentals and a coding question. This round lasted for approx 75 minutes.
  - Technical Round 3: In depth discussion on projects and previous work experience. Questions based on sorting techniques, asymptotic notation and time complexity. A programming question based on Threads. This round lasted for approx 75 minutes.

Sources of Preparation
Geeksforgeeks, Leetcode, GATE Notes

Other Relevant Information
Prepare subjects such as Operating Systems, Computer Networks, Database Management System, Data Structures, Algorithms and OOP. Prepare projects and resume.

Sector: IT

Name: *Brijgopal Dixit (2020H1030129P)*
Company: Citrix
Profile: Software Engineer

Recruitment Procedure
- There were 4 Rounds including (Online test + 2 Technical + Managerial)
- **Round 1 (Online Test):**
    - There were 2 coding questions and 40 MCQs that we had to complete in 2 hours.
    - The MCQs were of medium difficulty based on CS subjects including OS, DBMS, Networking, DS, C++ output based, Probability and some Quant Apti based.
    - 2 coding questions based on DP, one question was based on the Floyed Warshall algorithm and the other I do not remember.
    - This was the exact question - https://leetcode.com/problems/find-the-city-with-the-smallest-number-of-neighbors-at-a-threshold-distance/
    - 12 students were shortlisted after this round for technical interviews. Solving one coding question and a decent number of MCQs were enough to be shortlisted for the next round.
- **Round 2 (Technical Interview):**
    - I was asked to introduce myself. The interviewer picked up one of the projects that he liked and told me to explain. It was a networking based project(on SDN load balancing), and I explained it in detail.
    - Then asked about my work experience as I have mentioned in my resume and asked me to explain about the project and my role in it.
    - Then he checked my CS subjects knowledge by asking questions from OS, Networking , C++,OOPs.
    - Questions asked were:
        - What are the steps required to troubleshoot a server or network?
        - Expecting explanation about Ping and Traceroute
        - Multithreading in C++ (Mutex locks, semaphore)
        - Producer Consumer Problem
        - File handling in C++
        - Exception Handling
        - User level thread vs Kernel level thread

- This round mostly focussed towards the projects. So be prepared with all the projects mentioned in your resume.
- At last he asked me one coding question based on the variation of the LCS problem. Interviewer was very supportive and interactive , he was helping me wherever I was stuck.
- 8 people were shortlisted for the next round.
- **Round 3 (Technical Interview):**
  - This round started directly with a coding question. There were two coding questions to be solved in 1 hour .One was hard and the other was of medium difficulty level.
  - Questions asked were:
    - Hard one -
      https://www.geeksforgeeks.org/count-minimum-number-of-fountains-to-be-activated-to-cover-the-entire-garden/
    - Other was based on the Variation of Anagram problem.
  - I was able to solve the 2nd question completely and the first one partially and was selected for the next round. 7 people were shortlisted for the next round.
- **Round 4 (Technical + Managerial):**
  - My interviewer was a very senior person and he started with some introduction of each other, and then I was asked a design question.
  - He asked me to explain about what all the services are present in Windows OS and not present in Android OS. Detailed explanation was required.
  - How does a node connect to a network? What are all the steps to be followed ?
  - Ethernet and WIFI and Datalink layer protocols.
  - What are all the steps required by Browser to search a web page?
  - User and kernel level Multithreading.
  - How 3-way handshaking of TCP works and why it is required.
  - He also asked me to explain one of my most recent projects, then about my work experience, what my role was , and what learnings I got from the project .
  - What are the topics in C++ you find difficult and why?
- 3 people received the final offer.

Sources of Preparation

- I solved all the questions from MUST DO interview questions from GFG - https://www.geeksforgeeks.org/must-do-coding-questions-for-companies-like-amazon-microsoft-adobe/
- Youtube lectures of Aditya Verma and The CodeNcode channel . He explained the concepts and questions in a very good way .
- Self Paced DSA course from GFG.
- GATE exam Notes for OS, CN, DBMS.

Other Relevant Information

- I would suggest going through all the Interview experiences as it really helps during technical interviews.
- Be prepared with all the standard DP questions as this company mostly asked DP based questions.
- Prepare well for networking and OS as in technical interviews; most of the questions are asked from these subjects.

Sector: IT

Name: *Vishal John Varghese (2020H1030134P)*
Company: Citrix
Profile: Software Engineer

Recruitment Procedure

- Test:
  - 40 MCQ
  - 1 coding question - Medium level
- Technical Interview: Two coding questions
  - Find the subnet mask bit count, find the subnet mask - Bit manipulation
  - Given an array of 2n + 1 integers where each number is repeated twice except one number. Find that number - XOR all elements
  - What is a subnet mask?
  - Maths puzzle question - Find a number n such that, n%10 = 9 , n%9 = 8, n%8 = 7, n%7 = 6, n%6 = 5, n%5 = 4, n%4 = 3, n%3 = 2, n%2 = 1, n%1 = 0. Ans : LCM of 10, 9, 8, 7, 6, 5, 4, 3, 2, 1 = 2520 => 2520 - 1 = 2519
- Technical Interview
  - Brief introduction. Then we discussed the projects and other things mentioned in my resume. It was a high level discussion only, they didn't go into much details.
  - Two coding questions
    - Check if an IP address is valid or not (IPv4)
    - Given two arrays of strings, check if strings at the same index in two arrays are anagram or not. If not, find the min modification required to change it to anagram. You cannot add new characters, but the existing characters can be modified to any character.
    - System Design
    - Design an android application that can get information about the vaccination slots available. The data is provided through an API which is already existing and we need to filter the results out of that based on the various filters applied by the user.
    - I explained all the classes which are required. Also wrote the code for one of the classes and explained the data flow in the backend side. Basically we need to explain how the data flows and how we can handle the various filters and how it is being designed.
- Technical/Managerial Interview:
  - This round consisted of only one system design question, but in more

detail. I had to design a Job portal. He was expecting a basic design, then he moved on to the scaling, caching etc.
- ○ Also we discussed the various projects mentioned in my resume.
- ○ The interviewer also asked some managerial questions. They were focussing on my previous work experience. Whenever you mention something, justify it with an example from your life experience.
- ○ At the end he asked if I had any questions. Always make sure that you ask some good questions so that he gets an impression that you have researched the company and you are interested in the work that is happening at the company.

Sources of Preparation
- Coding:
  - ○ GeeksForGeeks, LeetCode
  - ○ Do the company specific questions as well from GFG.
- Technical:
  - ○ GATE notes, InterviewBit questions
  - ○ Puzzles
  - ○ GeeksForGeeks - Easy to Medium level puzzles
- Also read the interview experiences of that company. It will help you in judging their interview pattern and you can get a variety of questions as well.

Sector: IT

Name: *Debjani Ghosh (2020H1120263P)*
Company: Dell Technologies
Profile: Software Engineer

Recruitment Procedure
- Resume Shortlisting, Online Test, 2 Technical Interview Rounds, 1 HR Interview
- The online test was an MCQ-based test consisting of 60 aptitude and technical questions. The technical questions were mainly from DSA, OS, DBMS, and CN. These were standard questions so a revision of the most fundamental concepts in these subjects will help you a lot.
- The Technical Interviews were tough and tricky.
- Questions asked in Round 1:
  - Tell us about yourself.
  - What were your subjects in M.Tech?
  - I had taken a subject called Software for Embedded Systems. They asked me basic questions related to that such as, What is an Embedded System? How is it different from a general-purpose system?
  - Given an integer, find out if it is a power of 2.
  - Write a function in C that prints true if a string is a palindrome and false if it is not. The input to the function is a pointer to the string. I used the two indices approach to solve this problem. I was then asked to do the same purely with pointers. I could not take the help of any indices.
  - Short coding questions on arrays and strings.
  - Briefly explain your project(s).
- Questions asked in Round 2:
  - Tell us about yourself.
  - Briefly explain your M.Tech project(s) and projects from your work experience. What were the major challenges you faced and how did you overcome them?
  - Reasons for leaving my previous job.
  - Types of polymorphism in C++. Demonstrate it.
  - Demonstrate Inheritance.
  - Is it advantageous to run a multi-threaded program on a system with a single processor? Why/Why not? Is the processor idle when you're uploading a file from your hard disk to Google Drive?
  - Based upon the answer to these two questions, I was again asked if it was

advantageous to run a multi-threaded program on a system with a single processor.
- ○ Types of joins in SQL.
- ○ Rotate a 2D matrix by 90 degrees.
- ○ I was asked this puzzle. https://math.stackexchange.com/questions/406955/a-loss-and-gain problem
- ○ <u>HR Round</u> was mostly conversational. He asked me about my entire interview experience so far. Why do I want to work at Dell?

Sources of Preparation
- GATE notes of OS, DBMS, and DSA.
- I practiced coding problems from GeeksforGeeks and LeetCode.

Other Relevant Information
- If you need time to answer a question, do not hesitate to say so to the interviewer.
- Before the online interview starts, be ready with your notepad program or IDE.
- Talk to the interviewer about your thought process.
- Do not give up. If nothing is coming to your mind, start with a brute force approach. Often the interviewers give hints to proceed.

Sector: IT

Name: *Harshini N B (2020H1120297P)*
Company: Dell Technologies
Profile: Software Engineer II

Recruitment Procedure

- Resume Shortlisting, Online Test, Technical Interview + Managerial Round, HR Interview
- Test had 3 sections:
    - Logical Reasoning - Arrangement Problems, Coding-Decoding
    - Quant - Time, Speed, Distance, Time & work, Profit-loss & other topics
    - CS Subjects - GATE notes & GFG Last minute notes, Interviewbit notes.
- Test was easy. Questions were from RS Agarwal, Arun Sharma books. CS concepts from OS, networking port numbers, Linux-commands, DBMS , Algorithms , Data Structures
- Technical and Managerial Interview:
    - Tell us about yourself
    - Code debugging 4 questions (code snippets-to detect output and correct errors-based on pointers, increment-decrement operators), time complexities and one coding question from linked list- find Nth node from end of linked list with both brute force and optimized approach.
    - CS concepts- Spin lock, Semaphores, Process and resource management, Memory Management, Virtual Memory were asked.
    - Manager asked some questions –
        - Who is your mentor?
        - What is the hardest situation in your life?
        - What is your passion?
- HR Interview:
    - Tell us about yourself
    - HR discussed the team, location, and nature of work.

Sources of Preparation

- GFG must do coding questions.
- GATE Notes - Algorithms, Data structures, OS,CN,DBMS,OOPS
- Aptitude, Logical Reasoning from RS Agarwal, Arun Sharma books.

Other Relevant Information

Prepare from GATE Notes nicely for Face-to-face interview, answer with confidence , justify your answer.

Sector: IT

Name: *Prachi Godbole (2020H1120276P)*
Company: Dell Technologies
Profile: Software Engineer

Recruitment Procedure
- Resume Shortlisting, Online Test, 1 Technical Interview, 1 Technical plus Managerial Interview and 1 HR Interview.
- Online test:
  - MCQ-based test consisting of 60 aptitude and technical questions. The technical questions were mainly from DSA, OS, DBMS, and CN.
- Questions asked in Round 1:
  - Panel consisted of two industry professionals.
  - They asked me to introduce myself and also asked about my favourite subject in the Masters program. I replied Object Oriented Analysis and Design
  - OOPs concepts in detail, mainly the inheritance and the "diamond problem" and the difference between abstraction and encapsulation.
  - Then they asked me about my project, created multiple scenarios and asked me how I would handle them. How to handle concurrency in web applications, restrict DDoS attack, maintain session, etc.
  - Explain scheduler, Scheduling Algorithm, Priority inversion and Priority inheritance and how to implement it.
  - Explain process synchronization, difference between process and thread, interprocess communication. Explain in detail about mutex and locking mechanism.
  - Multithreading in Java.
  - Basic Linux Programming, Windows programming, Mutex API, etc.
  - Virtualization in OS
  - The round lasted for 30 mins.
- Questions asked in Round 2:
  - Tell us about yourself.
  - Briefly explain your M.Tech project(s) and projects from work experience.
  - Major challenges faced due to online mode of learning and how did you overcome them?
  - Reasons for leaving previous job and pursuing masters
  - What have you learned at BITS and using that knowledge, what would you

do differently if you had to start over again.
- Explain your responsibilities at your previous job.
- Do you have knowledge of servers and deployment in production environments?
- Walk me through your process of testing the product from inception to deployment.

- How do you proceed when a bug gets assigned to you?
- Preferred programming language.
- I replied Java
- Explain OOPs concepts, inheritance and polymorphism in Java
- Best part of my previous job.
- What do I expect from my career and employer? What would I be interested in working with?
- Since my preferred programming language was Java, would I be open to work with C/C++?
- Even though I had mentioned that I was interested in web development, would I still be open to learning and working with things which were not related to it?
- According to you, how did you perform in the previous round?
- The round lasted for 35 mins.
- Question asked in Round 3:
  - Round was brief and mostly conversational
  - I was asked about my interview experience and my thoughts on how I performed in the previous rounds. Also asked if I was comfortable with the location.

Sources of Preparation
- I practiced coding problems from GeeksforGeeks and HackerRank.
- Also, problem solving and mock interviews with friends helped a lot.

Other Relevant Information

- Do not get overwhelmed by reading the interview experiences of others.
- Walk the interviewer through your thought process while solving any problem.
- In most of the cases the interviewer just wants to understand how you approach the problem and analyse it. So don't worry if you can't come up with a perfect solution in one go.
- Have an in-depth knowledge of your project and do not shy away from stating your contributions in it.
- Group studies go a long way.

Sector: IT

Name: *Utkarsh Awasthi (2020H1120272P)*
Company: DELL SecureWorks
Profile: Software Developer 2

Recruitment Procedure

- Pre - Placement Talk, Online Test, Technical Interviews, Managerial Interview
- Online Test : Test consisted of 60 questions to be done in 90 minutes. Topics included conceptual GATE level questions on Computer Networks, Operating Systems, OOPS (JAVA), DBMS etc. Level was medium to easy.
- Interviews : There were 2 technical interviews and 1 Managerial Interview. The coding platform was notepad and an online IDE was used to compile and run the code.
- Technical Interview 1 : Questions asked -
  - Introduction and brief about projects, general overview and discussion over it, nothing in deep
  - Discussion on Hashing
  - Discussion on BSTs and Coding Question to find if a binary tree is a sumtree or not
  - Questions on resolution of errors while compiling the code, why did you get that error, what did you do to resolve it etc.
  - Discussion on OOPS concepts, give explain inheritance with example
  - Discussion on web development project
- Technical Interview 2 : Questions asked -
  - In depth discussion about projects (web development specific)
  - OOPS concepts, runtime polymorphism and implement it in code
  - Some simple queries
  - 2 Coding questions -
    - Return the array of duplicate elements in an array
    - Return the no of vowels consonants special characters and numbers, should work on all Interviewer TCs
    - System Design Approach used in the project (from Resume) and implementation of Singleton Design pattern
- Managerial Interview : Questions asked -
  - Why Secureworks?
  - How would you benefit us?
  - Where do you see yourself in 5 years ?

- General overview of the company and its vision
- Coding Question - Given a string, return the value of the expression given in it, prioritise addition operation over multiplication. String example : "3m2a4m4a6m2"

Sources of Preparation

GFG, InterviewBit, GATE Notes, most asked interview questions, Luv Babbar 450 Questions sheet

Courses and Certification

No subject as such. Web development and Cryptography/Network Security courses will be beneficial.

Other Relevant Information

Look for Secureworks Interview Experience on Youtube for more in depth explanation.

Sector: IT

Name: *Yashaswi Pandey (2017B5A70971P)*
Company: Eightfold.ai
Profile: Member of Technical Staff

Recruitment Procedure

- First Round - Coding Test consisting of 3 questions. One simple implementation, one number theory (Medium Difficulty), and one Graph+DP (Medium Difficulty) problem.
- Second Round - Technical Interview:
  - The Interviewer gave me 2 problems to solve.
  - The first problem was about finding whether a sorted circular linked list is sorted in ascending or descending order.
  - The second problem required me to make a queue using stacks. Correct and efficient code was expected for both the problems.
- Third Round - Technical Interview:This interview was a design based interview. I had to implement the like and dislike feature for a social networking website. Cases of concurrent updates to the databases were to be handled as well.
- Fourth Round - Technical Interview:
  - The interviewer started off by asking me to prove the following statement - Given a binary tree, prove that $T = L-1$, where T is the number of nodes with 2 children, and L is the number of leaves.
  - The next problem was to find the shortest path from a starting cell to a destination cell in an n * m matrix of numbers. This can be solved using Dijkstra's algorithm. Correct code was expected.
  - The final problem was to find the subtree of maximum sum inside a given binary tree. Correct code was expected here as well.

Sector: IT

Name: *Nedunuri Sai Charan(2020H1120281P)*
Company: GE Healthcare
Profile: SDE (Edison Engineering Development Program)

Recruitment Procedure

- The process consisted of 2 online Written tests, 1 Technical interview, 1 Managerial interview and 1 HR interview.
- Online Test 1:
  - This test consisted of 3 subsections:
    - Quant, Logical, Verbal.
    - CS Technical objectives
    - Two coding questions.
  - Every section had a time limit. Navigation between the sections was not possible.
  - Try to completely execute 1 code and partially execute the other. For objective questions, GATE revision is sufficient. 5 people were selected from the Pilani campus after this test.
- Online Test 2:
  - This is Pymetrics assessment by Gamification, lasts for 30 min.
  - You will be given around 10 games, and have to play them most optimally in a very short span.
  - The games may look simple but this is the most important round as only 2 people got selected after this round for interviews.
- Technical Interview:
  - Brief discussion of previous work experience and any 1 project in depth.
  - As the company is in the transition phase from its legacy code (in C, C++) to OOP (Java), interviewers will mostly focus on OOPs concepts like virtual pointers, virtual tables, pure virtual functions, abstract classes, and interface. A coding question on strings (reverse the vowels in string) was asked.
  - They expect us to execute everything online on an IDE. Be ready with executable examples for every OOPs concept.
  - Joins, Normalization, and some questions from the resume were asked.
  - When he asked if I had any questions, I asked the interviewer about the

technologies they are working on as they work on large scale healthcare appliances, how the development environment is virtualized.
- This round lasted for 30 to 40 min and 2 people were selected.

- Managerial Interview:
  - This was conducted by the Delivery manager. You must be very clear and confidently answer why you choose the Healthcare domain. Mostly an organizational fit test.
  - Asked to brief about the compulsory courses taken till now. Manager explained the Healthcare domain, its various projects and how various Engineering fields are interrelated in this domain.
  - Asked a few doubts and tried to show my enthusiasm when she was explaining. Some personality assessing questions like when will you be happy and when will you get angry were also asked.
  - This round lasted for 30 min and both were selected.

- HR Interview:
  - Walkthrough of projects mentioned (tests how well we can communicate and make her understand)
  - What is your weakness and how are you trying to overcome it?
  - What do you know about GE?
  - What change can you bring to GE?
  - Why did you choose the healthcare domain?
  - Finally both of us got selected.

Sources of Preparation

- Pymetrics Assessment by Gamification from Youtube
  https://www.youtube.com/watch?v=zxXrxSbewfI
- Self paced DSA course, Must Do coding questions from GFG.
- GATE notes revision and oops concepts revision.

Other Relevant Information

- Try to understand every game in Pymetrics Assessment by Gamification from Youtube before attempting the test as this is the major elimination round.
- For technical, be very clear with OOPs concepts in depth as the company mostly works on Java.
- For managerial, you should be ready to defend why you choose the healthcare domain.

Sector: IT/Finance

Name: *Paras Jain*
Company: Goldman Sachs
Profile: Software Engineer

Recruitment Procedure

- Pre Placement Talk
- Online Coding and Aptitude Test
- Online Test had the following sections:
  - 2 Coding Problems (Easy – Medium), Time limit around 20-25 mins
  - MCQs on Programming, OS, and other fields
  - Advanced Coding (1 Question Hard), Time limit 45 mins
  - Subjective Questions
- The platform used was Hackerrank. Each Section had its own time limit. The candidate has the option to switch from one section to the other. In that case, the timer for the other section starts.
- Total duration of the test was about 135 mins. High Speed and accuracy were required to clear this round. Also, subjective questions that were mostly HR-based require the candidate to put some thought.
- Around 20 people were shortlisted for the interviews. The firm also used the resume as a shortlist criteria and the respective teams were already assigned. For instance, if a person has experience in Machine Learning, analytics or other fields, they were assigned to the interviewer who specifically interviewed in these areas.
- First interview:
  - Began with a quick introduction of myself. Further, the resume was discussed in some length.
  - Subsequently, I was asked questions based on probability and statistics along with programming. The firm cares a lot more about the logic and the thinking process, it is not necessary to arrive at the exact answer.
  - Although, quick out of the box thinking is required as the questions they ask are tricky and are meant to confuse the candidate. It is highly recommended that one takes some time and frames a few thoughts before answering.
- Second interview:
  - This was purely based on a resume with each and every point discussed in great depth. One needs to be absolutely thorough with every word they put in the resume.

- I was asked about a specific method I implemented in a project I did 2 years ago. Overall, it depends upon how well you can communicate your ideas with the interviewer and suggest methods for improvements.
- Some candidates also had a third round, although I only had two rounds. Finally, 5 candidates were selected for the position.

Sources of Preparation

Leetcode, GeeksforGeeks, InterviewBit. It is recommended that candidates be consistent with their practice in writing code and focus more on quality rather than quantity.

Courses and Certification

DSA, OOP, OS, Probability & Statistics. Also, I would recommend the course Applied Statistical Methods offered as part of a data science minor. Having some knowledge about finance is an added advantage, although they don't test engineering graduates on finance.

Other Relevant Information

- Maintain your calm during the interview. Do not get worked up when a question is posed. Think logically and answer. The interviewer will always help you reach the solution.
- Finally, be curious. If you are implementing a method, ask yourself why is this method getting implemented, what the tradeoffs in this implementation are, and whether there is a possibility to improve efficiency.

Sector: IT

Name: *Tanya Garg (2018A7PS0215P)*
Company: Goldman Sachs
Profile: Software Engineer

Recruitment Procedure

- Pre-placement talk, Online Test, Technical Interviews
- Eligibility criteria: Open to all branches, minimum 6 CGPA
- Online Test had 5 sections:
    - 2 basic coding questions to be done in 30 mins. Difficulty around Leetcode medium
    - 8 Quant MCQs to be done in 25 mins: +5/-2 marking. Puzzles, probability and math.
    - 1 Advanced coding question to be done in 45 mins
    - 2 subjective behavioural questions to be answered within 200 words in 15 mins
    - 7 DSA, OS and CS fundamentals MCQs to be answered in 20 mins: +5/-2 marking
    - Keep track of time, especially in section 1, since section wise limits are strict with no time rollover, and try to attempt those MCQs first which seem familiar/easy.
- Interviews (could vary between 2-3 rounds, 2 Technical + 1 HR or 1 Technical + 1 Technical/HR):
    - Asked coding questions on Arrays, Linked Lists, DP, Sliding Window, etc., followed by CS fundamentals (C++ vs Java, heap vs stack memory, dynamic memory allocation, etc.) and OOP and Database concepts (Properties of OOP, why OOP, ACID properties, locks in database, etc.) and some maths (solution of quadratic equation in O(1) time, proof of finiteness of an algorithm)
    - Interviewers are more interested in knowing about the thought process and logic, rather than coding the exact syntax for a question. Explain your approach in a structured way and ask for clarifications wherever required. Try to think out loud even if the approach isn't the most accurate or efficient one, the interviewer will guide you towards the correct answer.
    - Always mention the time and space complexity of any algorithm and try to gradually improve upon the same.
    - Be thorough with each and every word you have written on your resume

and read up on possible interview questions on the technologies you have used in your projects. Don't fake anything in the resume, the interviewer will instantly know.

Sources of Preparation

Practice on Leetcode, Hackerrank and InterviewBit for coding questions, read up on GFG for CS fundamentals and frequent interview questions on OOP, DBMS and OS. College courses are also enough for CS fundamentals.

Courses and Certification

DSA, OS, OOP, DBMS and any relevant CS Electives

Other Relevant Information

Researching about the role offered and the company before the interviews would help show your interest. Attend the PPT attentively and always ask questions to the interviewer at the end.

Sector: IT

Name: *Abhishek Agnihotri (2020H1420200P)*
Company: HCL Technologies
Profile: Senior Software engineer

Recruitment Procedure
- **Technical test** - Basic coding questions and aptitude questions were asked. The duration of the test was one hour. All the questions asked were of medium difficulty.
- **Technical interview** - The duration of the interview was 30 min. Questions asked were in the following manner:
  - Introduce yourself.
  - Tell me about your projects related to machine learning and time series forecasting.
  - Questions in detail were asked on each project.
  - Which one of the following is faster CPU or GPU?
  - What are the libraries used in the machine learning project?
  - What are the visualization techniques used in machine learning?
  - Complete pipeline of machine learning project.
  - Questions asked regarding deep learning.
  - Difference between Tensor flow and Keras?
  - Questions asked on deep learning projects.
  - Basic questions were asked on MATLAB.
  - Explain your best project.
- **HR interview** - The duration of HR interviews was 10 min. Questions asked regarding location and salary

Sources of Preparation
Udemy courses, Coursera, YouTube

Courses and Certification
Excel, MATLAB, SQL, ML, Deep learning, Python

Other Relevant Information

Prepare good projects in Machine and deep learning and python to perform well in any data scientist or IT jobs.

Sector: IT

Name: *Piyush Vig (2020H1410163P)*
Company: HCL Technologies
Profile: Senior Software Engineer

Recruitment Procedure
- Online Test, Technical Interview, HR
- There were two online tests
- First test had 5 sections:
    - English
    - Quantitative Aptitude
    - Logical Reasoning
    - Two sections were on basic programming related questions
- Second one had 2 sections:
    - We need to write logic and time optimization of the basic program problems
    - Logical and Quant questions
- Online test was held on Microsoft form platform. It was of medium difficulty and you can go back to previous questions and sections. The time limit was of 1hr for each test.
- In Technical interview, they asked me following questions :
    - Programming questions of the written test.
    - Logic behind some basic maths and data structure questions like (how can you find out if circles are intersecting or not in different planes).
    - Basic OOPS concept questions

Sources of Preparation
Try to solve basic programming questions on websites like Geeks for Geeks, Faceprep, etc

Courses and Certification
No certifications were asked, only questions related to logic behind the programme were asked, not questions related to a particular programming language.

Other Relevant Information

- In any interview try to communicate with the interviewer, try to make it a two-way discussion rather than a question answer session.
- Try to be concise and precise in your answers. Always read about the company, their ongoing projects and job description before the interview and try to integrate those things in your answers during the interview.

Sector: IT/Analytics.

Name: *Rishabh Kumar Srivastva (2020H1420189P)*
Company: HCL Technologies
Profile: Sr. Software Engineer (TFG and Analytics)

Recruitment Procedure:
- Online Test, Technical Interview , H.R.
- Online Test:
  - Consisted of Aptitude, English and Basic Programming Questions .
  - Test was for 1 hour.
  - Questions were easy to medium level .
  - For programming questions, knowledge of any one language is needed .
- Technical Interview (for Analytics Field):
  - There will be domain Specific questions and you must have at least one project relevant to the domain you have chosen. Ex: For the Analytics field, I had some projects on Excel, SQL.
  - Good understanding of Basic Math (11th & 12 th class) and good analytical skills. Ex: I was asked , How to determine if a pt. lies inside a circle or Outside the circle? And a puzzle question.

Sources of Preparation
Revised 11th and 12th math and solved some puzzles on the internet.

Courses and Certification
- Self-taught, no certification. But, if you can get a certification in Machine Learning, SQL, Excel that would be helpful.
- I have watched complete lectures on YouTube for Machine Learning and SQL
- The most important part is that you have worked on projects utilizing these tools .

Sector: IT/ Analytics.

Name: *Vikas (2020H1420194P)*
Company: HCL Technologies
Profile: Sr. Software Engineer (TFG & Analytics)

Recruitment Procedure
- Online Test, Technical Interview, HR
- Online Test
  - Involved questions based on verbal, data, and logical reasoning as well as coding.
  - This test was easy to medium level and adequate preparation would be sufficient to get shortlisted for further rounds.
- Technical Interview
  - It is a purely resume-based interview. Anything on your resume can be asked about in detail, no matter how unlikely it may seem. Hence, try to keep it simple.
  - I had projects related to ML & SQL. Technical questions on Python were asked.
  - Questions about the company and why only this role?.
- HR: Nothing special, just a casual conversation about location, timings, etc.

Sources of Preparation
Solved a lot of aptitude questions, Youtube channel for Python and SQL

Courses and Certification
- Coursera for Python and Excel analytics
- Time series analysis and forecasting using Python by Udemy.

Other Relevant Information
Don't worry about what you do not know. Just make sure that whatever you have mentioned you know, you are thorough with it.

Sector: IT

Name: *Pushkal Goyal (2020H1120271P)*
Company: Hewlett Packard Enterprise - HPE
Profile: Full-Time Graduate

Recruitment Procedure
- Online Test, Technical Interview, Managerial Interview
- Online Test: Technical Aptitude, CS fundamentals, Coding Questions
- The test was easy.
- Technical Interview: Asked about my projects, some coding questions on Linked List[Medium], and to code them as well.
- Managerial Interview: Asked 2 coding questions from Linked List and Strings having difficulty level Medium and Easy. Shared all approaches with the interviewer one by one.

Sources of Preparation
Interviewbit, Leetcode

Other Relevant Information
- Leetcode and Interviewbit are good for practice.
- Always ask the interviewer for feedback and if he/she gives some negative feedback, try to explain to him with some genuine reason. Chances are the interviewer will consider your explanation.

Sector: IT

Name: *Himanshu Sharma (2020H1120282P)*
Company: IBM
Profile: Software Engineer

Recruitment Procedure

- IBM cognify test: Test had 6 sections. All sections included questions to test your cognitive abilities in the form of games. The challenge was to complete the test with accuracy in the provided time frame.
- Coding Test:
  - Coding test had 4 questions each of easy to moderate difficulty.
  - It also had 10 MCQs from Data Structure, OS, DBMS concepts.
- Technical + Managerial Round:
  - Questions were asked about professional experience and projects done. Questions also included topics like data structures, algorithms, OS,DBMS and Networking concepts.
  - Managerial round was focussed more on knowing your professional aspirations and how you plan to excel your career in coming years.

Sources of Preparation

GeeksforGeeks, InterviewBit, Cracking the coding Interview (Book)

Sector: IT

Name: *Guntaas Singh (2018A7PS0269P)*
Company: Indeed
Profile: Software Developer

Recruitment Procedure
- Online Test, 3 Technical Interviews, Manager Round
- **Online Test:**
  - Two easy coding questions - 0/1 Knapsack and Sliding Window
  - Platform: HackerRank, Duration: 60 minutes
- **Technical Interviews:**
  - Three rounds with a single coding problem to be solved in each, along with implementation in an object-oriented programming language. The problem statements were ambiguous and the candidate was expected to ask and clarify the expectation for different cases.
  - The focus was not on arriving at the optimal solution, but on correct approach, complexity analysis and implementation of the proposed solution. I was also asked to explain one of my projects in detail.
  - Find the best clean job title out of a list, for a given raw job title, scoring each clean title on the basis of the number of common words, matching each word at most once.
  - Derive a space-optimized representation for an arbitrary binary tree which supports finding the left or right child for any node (given an identifier) in constant time.
  - Design and implement a space-optimized data structure for maintaining the set of expired job IDs (64 bit integers) supporting efficient methods for adding new job IDs to the set and checking if a given job ID belongs to the set.
- **Manager Round:** Discussion on questions asked in technical rounds, previous internships, projects. Behavioural and situational questions, expectations from the company.

Sources of Preparation
InterviewBit, LeetCode

Courses and Certification

Data Structures and Algorithms, Object-Oriented Programming, Information Retrieval

Sector: IT.

Name: *Shriyan Ashwin Ashok (2020H1030125P)*
Company: Infineon Technologies
Profile: Software Engineer

Recruitment Procedure

- Online Test, Technical round, Manager round,HR round
- Online test had 7 sections of MCQs which are of GATE level: Python, Java, C, C++, Operating Systems, DBMS.
- Technical round :
    - Tell me about yourself.
    - Brief discussion about projects.
    - Questions on OOPs concept.
    - Coding question: Implement Linked List
    - Coding question: Reverse a Linked List in groups of given size (iterative and recursive solutions)
    - Coding question: Bit Manipulation (2's Complement).
    - Coding question: Bit Manipulation (Set/Reset/Toggle n^{th} bit)
- Manager round :
    - Technical questions on operating systems,C.
    - Discussion about projects.
    - Coding Question: Bit Manipulation (Reverse Bits).
    - Coding Question: Detect and Remove Loop in a Linked List
    - Coding Question:Write your own memcpy() and memmove() functions.
- HR round :
    - Discussion about my academics and family background.
    - Why this company?
    - What did you like about this company?
    - What Qualities have you developed as a person from Bachelors to Masters education?
    - What was the time when you innovated something which was used by many people?
    - What does innovation mean to you?
    - What motivates you to do your daily task/work?
    - Would you be fine with relocation?
    - Finally he asked whether I have any questions for him

Sources of Preparation

- Coding questions from GeeksForGeeks, Leetcode(easy and medium level), InterviewBit.
- Love Babbar 450 sheet
- Basic GATE Notes and InterviewBit notes for OS, DBMS, CN .
- OOPS Concepts and examples(YouTube).
- For Puzzles, refer to the puzzles page on GeeksForGeeks and Medium.

Other Relevant Information

- Be confident while answering the interview and do not give up on questions you cannot answer and reply that you have studied the topic but cannot recall as of now.
- Interact with the interviewer(on technical aspects) as much as you can.
- Try to convey your coding approach while writing the code and keep the conversation going.

Sector: IT

Name: *Manne Rajeev Kalki Phaneendra (2017B1A11026P)*
Company: ISS Governance, Mumbai
Profile: Junior Analyst

Recruitment Procedure
- Resume Shortlisting, Online Test, Technical Interview, HR
- Test had 2 sections: Core Java Questions and Aptitude
- Total 70 questions. (35 Java questions, 35 Aptitude).
- Test was simple. However, it is important to maintain speed to finish all questions.
- Questions:
  - Tell us about yourself.
  - Follow up questions from what you answer in the online test.
  - About your Projects.
  - 2 DSA questions.
  - 2 SQL questions

Sources of Preparation
- Prepare Java (OOP, Collections) concepts.
- Javatpoint is very good website for java
- Prepare DSA from interview Bit.
- Prepare DBMS(SQL) from college or any online courses.

Courses and Certification
No certification as such. Learn Java, DBMS and DSA. Preparing these subjects could be useful.

Other Relevant Information

- Most job interviews and not just ISS Governance are FIT based rather than SKILL based. You need to be able to convince the recruiter why you wish to join that particular organization, particular job sector and why you are suitable for the role and not work in some other sector.
- To answer this, apart from preparing about that one company, you need to know of other job opportunities specific to your profile and then justify why this job among all the choices you have.

Sector: IT

Name: *Aditya Mittal (2018A8PS0795P)*
Company: Jivox
Profile: Software Engineer

Recruitment Procedure
- Resume Shortlisting, Online Test, 3 Technical Interviews
- The first round was an online coding round. It had 19 Questions, 15 MCQs based on OOP, OS, DBMS and 4 Coding Problems.
- All 3 technical Interviews were conducted on HackerRank (Codepair).
- In the first two rounds, there were 2 DSA problems in each; for each problem you had to explain your approach, write code for it and the interviewer ran them on all available test cases.
- The third round focused on CS fundamentals and 2 DSA problems were also asked.

Sources of Preparation
Geeks for Geeks, Interviewbit, HackerRank

Courses and Certification
Algorithmic Toolbox by UC San Diego (Coursera), Problem Solving Intermediate (HackerRank)

Other Relevant Information
Don't neglect CS fundamentals, prepare them well. Some companies ask LLD problems, practice some basic LLD problems (Design a Parking Lot, Design IRCTC etc).

Sector: IT

Name: *B.Hemanth Vinay (2020H1420202P).*
Company: L&T Infotech.
Profile: IIOT Cloud

Recruitment Procedure
- Online Test, Technical Interview, HR Interview.
- Online Test had 5 sections:
  - Workplace Competency Test: 14Q, 30 min. Situation based test that measures the workplace skills and values needed for an entry level role. In this Section, you need to mark the best and worst action for every situation.
  - Coding: 2Q, 45 minutes. Easy to Moderate level.
  - Spoken English: 6 subsections in this section. Recording will be played, you need to repeat the sentence. Other sections are similar to any other listening test in any language based competitive exams. Each question has individual timers.
  - Essay Writing: 1 Topic, 20 min.
  - Personality based: 72Q, 15 min. You need to rate yourself on a scale for questions related to your personality.
- Technical Interview:
  - The interview is for 30 min.
  - Tell me about yourself.
  - Technical questions: My profile is IIOT (Industrial IOT), so the questions were related to mechanical subjects and Machine Learning.
  - Situational based questions: These questions test how you might respond to a hypothetical situation.
- HR Interview:
  - The interview is for 10 min.
  - Why L&T Infotech, whether I had any backlogs, willing to relocate or not, and a few more questions to confirm the details related to my academics.
  - Prepare for basic HR questions.

Sources of Preparation
Youtube videos of **Krish Naik**. GeeksforGeeks and HackerRank for coding practice.

Courses and Certification

Any projects in machine learning related to industry 4.0 will certainly be a huge plus.

Other Relevant Information

Most job interviews are FIT based rather than SKILL based. You need to be able to convince the recruiter why you wish to join that company and that profile in particular.

Sector: IT

Name: *Chinmay Gupta (2017B5A20582P)*
Company: LTI
Profile: Software Engineer

Recruitment Procedure
Resume Shortlisting, Online Test, Technical Interview, HR

Sources of Preparation
Leetcode, InterviewBit

Courses and Certification
DSA

Sector: IT

Name: *Deepankar Pradhan (2020H1060212P)*
Company: L & T Infotech
Profile: NWOW (New Ways of Working)

Recruitment Procedure
- Online Test, Technical Interview, HR Interview
- Test had various sections for testing skills such as critical thinking in real life case scenarios, coding, listening, speaking, writing, psychometry.
- Test was of 2 hours and the difficulty level was easy to medium. However, it is important to maintain speed to finish all questions. Going back to previous questions was not allowed.

Sources of Preparation
- General aptitude and reasoning practice to help in solving logic building questions.
- Basic Coding practice with aim mostly on writing efficient code.
- Learning one or more trending technologies can help in boosting the profile as well as one's confidence.

Courses and Certification
No specific courses as the roles offered and their requirements would vary but learning about trending technologies can always give an edge, ones like AI/ML.

Other Relevant Information
Overall, the process can largely vary based on one's driving force towards the role applied for in L&T Infotech, as this is in general as well. Mapping the skills and experience acquired through various endeavors to the applied role will create a focussed mindset for the candidate and leaves a positive impression on the evaluator at every stage of assessment.

Sector: IT

Name: *Harshita Gupta (2018A2PS0147P)*
Company: L&T InfoTech
Profile: Data Engineer

Recruitment Procedure

- Resume Shortlisting (CGPA > 6 per semester)
- Online Test : The assessment had 4 sections -
  - <u>Workplace Competency Test</u> : Situation Based test that measures the workplace skills and values needed for any entry level role. The candidate has to mark the next and the worst action for each situation.
  - <u>Automata</u> : This section had 2 coding questions.
    - To find the elements which are perfect squares in the given array.
    - To print the list of prime numbers within a given range.
  - <u>SVAR - Spoken English</u> : This section had some spoken English questions such as -
    - Read the sentence which appears on the screen.
    - Listen to the audio and repeat the sentence.
    - MCQs based on the audio conversation.
    - Synonyms of the word.
    - Correct the tense in the sentence.
    - Speak for 45 seconds on the given topic (such as "Poverty").
  - <u>WriteX Pro - Essay Writing</u> : Write an essay of approximately 400 words in 20 minutes.
  - <u>Personality</u> : General behavioral questions.
  - The test was easy, however it is important to maintain the speed to finish all sections. Going back to the previous question was not allowed.
- Technical Round: Major questions were revolving around my PS2 work.
  - Introduce yourself.
  - What work are you doing?
  - Questions related to SQL -
    - Update query.
    - What are joins and why are they required?
    - Types of joins. Explain any one.
  - What are ANNs?
  - What is standard deviation and its formula?
  - Questions related to OOP -
    - Primitive data types.

- - - ■ Multithreading and multitasking
  - ○ Coding questions:
    - ■ Find the second largest element in an array.
    - ■ Coding to print the list of prime numbers within a range.
    - ■ How to check if a string is palindrome?
    - ■ Will the condition for the above question change if the string is of odd length?
    - ■ How to find the length of a string without a built-in function?
- HR Round:
  - ○ Introduce yourself.
  - ○ Why data products?
  - ○ Biggest hurdle in college.
  - ○ Some easy situation based questions with explanation.
  - ○ Are you a team player? give evidence from the current internship.
  - ○ Willing to relocate?

Sources of Preparation

General HR questions from GFG archives, easy to medium level coding questions from InterviewBit, SQL interview questions from InterviewBit.

Courses and Certification

Object Oriented Programming (OOP), Data Science related courses such as NNFL, ML, Data Mining.

Other Relevant Information

Be confident and think loud even if you are unsure about the answer. And you need to be able to convince the recruiter why you wish to join that particular organization and not work in some other sector.

Sector: IT

Name: *Kartik Yogesh Patil (2017B2AB1023P)*
Company: L & T Infotech
Profile: Software Engineering – (NWOW)

Recruitment Procedure
- Resume Shortlisting
- Online test: It was a 2-hour long personality + coding test. Coding part was for 45 minutes and 2 questions were asked. Level of questions was easy.
- Technical Interview: Basic questions on Python and SQL were asked and 3 simple questions were asked to be solved. Further resume points were discussed. The interview lasted for about 30-45 minutes.
- HR Interview:
  - Situation based questions
  - Why do you want to join LTI?
  - Some CV points were discussed.

Sources of Preparation
Multiple Youtube channels, PU chronicles, HackerRank

Other Relevant Information
Confidence is the key. They are looking for potential and willingness to learn new technology stack as the role requires working on multiple interesting technologies.

Sector: IT

Name: *Manan Batheja (2017B2A40514P)*
Company: L & T Infotech
Profile: Java/Python Developer

Recruitment Procedure
- Online Test, Technical Interview, HR Round
- The online test included 2 easy questions on arrays and general speaking and listening assignments.
- The interview included discussion over the projects and internship. There were some elementary questions on OOP and DBMS
- The HR round included general questions like About yourself, why LTI, why this specific role, etc.

Sources of Preparation
- For preparation I focused on 3 subjects primarily DSA, OOP and DBMS
- For DSA I practiced easy-medium questions on array, 2D array, strings, recursion, Linked List, Trees, Stack, Queue, Priority queues, Heap, C++ (STL), etc.
- There are two ways possible for OOP either Lecture slides (first 15 are extremely imp) or simply google OOP interview ques. I did both but either would be sufficient.
- For DBMS I just read a few interview questions and learnt SQL syntax (conditions, joins, etc)
- For all the above you can refer to any online resource, I used leetcode, gfg, etc

Courses and Certification
DSA and OOP

Other Relevant Information

If you are not from circuital branch make sure your preparation is very focused, in the sense, primarily focus on DSA then OOP then DBMS. If you don't have any project or internship in IT simply make a few basic projects in Java or C++

Sector: IT

Name: *Parth Batra (2017B4A40871P)*
Company: L & T Infotech
Profile: Data Products

Recruitment Procedure
- Test (2 hours) had 4 sections:
- Behavioural Questions (Choose the Best and worst option based on scenario)
- Coding Questions (2 for 45 minutes)
  - Language Based (Grammar, Vocabulary, listening comprehension, Speaking test)
  - Writing Prompt (20 min to write 100-400 words on given topic)
  - Personality based Questions (Strongly Agree to Strongly Disagree)
  - Test is easy but make sure to maintain your speed and don't make silly mistakes as cut-offs would be high.
- Interview Questions (approx. 30 min):
  - Introduction
  - Basic DBMS, OOPS, SQL with examples
  - About projects and certifications on the Resume.
  - Please be sure to prepare for the subjects mentioned in the resume
- HR Question
  - 1-2 Situational Questions based on ethics, workplace situations
  - Some common HR Interview Question

Sources of Preparation
Interview Bit for Revision of OOPS and DBMS, YouTube and GFG for past year interview experiences, LeetCode for Coding Practice

Courses and Certification
Questions were from the basics, but they asked about the certifications. My relevant Certification were Deeplearning.ai DL Specialization, John Hopkins Data Science Specialization

Other Relevant Information

- You should be confident throughout the interview experience. This goes a long way.
- Focus on the basics. You should know details about the Job description and should have clarity about the subjects mentioned in the CV.

Sector: IT

Name: *Sanidhya Vijaivargia (2018A2PS0077P)*
Company: L & T Infotech
Profile: Software Engineer (MFG Oil/Gas)

Recruitment Procedure

- Online Test, Technical Interview, HR
- Test had 4 sections:
  - Speaking and Listening- based on a short audio conversation, the only type of question was to identify if the given statement can be inferred from the audio or not.
  - In the Speaking round we had to read the sentence out aloud in a given timeframe Essay Based (write in about 100-400 words)
  - Coding (2 Questions):
    - Count the number of characters in a given string for a given input.
    - Sort the k elements of an n-sized array in ascending order and n-k elements in descending order.
    - https://www.geeksforgeeks.org/program-count-occurrence-given-character-string/
    - https://www.geeksforgeeks.org/sort-first-k-values-in-ascending-order-and-remaining-n-k-values-in-descending-order/
  - Situation based- Given a problem statement with choices and you have to give the best and worst choices accordingly
- Test was easy. However, it is important to maintain speed to finish all questions. All sections were timed. Going back to previous questions is not allowed.
- My technical interview was resume based and asking general questions about the technologies mentioned
- Questions:
  - Asked my grades of Xth,XIIth and college semester.
  - Question 1: What is the most unsatisfactory thing that has happened in your life?
  - Question 2: Where have you contributed the most while working in a team?
  - They care more about the thought process. Ask for clarifying information if necessary

Sources of Preparation

GeeksforGeeks, InterviewBit, Codechef

Courses and Certification

No specific courses done as in my interview I was asked about the web technologies used in my internship.

Other Relevant Information

Be clear about your projects and practice DSA

Sector: IT

Name: *Saujanya Gupta (2018A1PS0456P)*
Company: Larsen and Toubro Infotech (LTI)
Profile: SFDC

Recruitment Procedure
- Resume Shortlisting, online Test, Technical Interview, HR interview
- Students have to fill up the form with an updated resume.
- The online test was of 2 hours and had 5 sections. Two sections were English and vocabulary, one section was for essays, one section was for coding, and there was a personality test. Coding questions were of easy to medium difficulty. Overall test was easy but one should keep time in mind.
- In technical interviews, they will ask about yourself. There were some questions about OOPs. Most of the questions will be related to your resume about your past experiences and projects.
- The HR interview was also good and pretty decent. Questions were straight forward, about strengths and leadership qualities.

Sources of Preparation
Just go through your resume once. You should have an idea about things mentioned in your resume. Go through the basics of OOPs. You can read it from any book or just learn from Google.

Courses and Certification
No subject as such. Candidates were asked easy questions from the resume and terms mentioned in your resume.

Other Relevant Information
- Most job interviews are FIT based rather than SKILL based. You need to be able to convince the recruiter why you wish to join that particular organization and not work in some other sector.
- To answer this, apart from preparing about that one company, you need to know of other job opportunities specific to your profile and then justify why this job

among all the choices you have.
- Try to design your resume in a way that it should look like why you have applied for that position. If you have used any tool before, listed in JD, try to mark it in bold.

Sector: IT

Name: *Shubhendu Kumar Tripathi (2017B1A10433P)*
Company: L&T Infotech
Profile: Java/Python Developer

Recruitment Procedure
- First round had Aptitude, English, Behavioral, Article Writing and 2 Coding Questions (1 Easy and 1 Medium). It was a 2 hour long round.
- Second round was a technical interview which was 30-40 min long. It was basically resume grilling. I was asked questions on Deep Learning, DSA, OOPs, DBMS and SQL, as these were few key points in my resume.
- Third and last round was a basic 10 min HR interview with common HR questions.

Sources of Preparation
Leetcode, Interviewbit and GFG.

Courses and Certification
Data Structure and Algorithms, Machine learning

Other Relevant Information
The company came in the first semester but was open for all, even for the students sitting in placements for the second semester.

Sector: IT

Name: *Siddharth Singh (2018A4PS0024P)*
Company: L&T Infotech
Profile: Software Engineer

Recruitment Procedure
- Online test, Technical interview, HR.
- Online test included questions related to logical reasoning, English and coding.
- English and logical reasoning parts were easy, two coding questions were there from easy to medium level DSA questions.
- Technical interview was focused on internship work and projects.

Sources of Preparation
GFG and LeetCode.

Courses and Certification
No such certification is required. Knowledge of OOP, DSA and other CS fundamentals is required.

Other Relevant Information
Make sure to revise all your projects and prepare yourself to answer questions related to technologies used in building them and also be prepared for DSA problems and questions related to CS fundamentals.

Sector: IT/Consulting

Name: *Utkarsh Dixit (2017B1A10403P)*
Company: Larsen & Toubro Infotech
Profile: AI Automation Consultant (SFDC)

Recruitment Procedure
- Round 1: Online AMCAT Test.
  - The Test consisted of multiple sections for basic reasoning, psychometric test, English assessment (MCQs, verbal/audio, and written proficiency in the form of a short essay).
  - Additionally, there was a 45 min coding round with 2 coding questions, one easy and one medium. In my observation those who were able to solve at least one coding question were shortlisted for further rounds. About 40 were selected here.
- Round 2: Technical interview based on the profile you had selected prior to the Online Test.
  - The questions were largely similar across profiles while it was required to have a very basic understanding of the terminologies in the profile you were sitting for.
  - I would rate the interview to be an easy one. You should just know your projects and everything on your resume with sufficient depth. The interview also tilted in the direction wherever you wanted to take it.
  - An elementary knowledge of OOP is required. I also had an IT PS Station of which I could speak about, so I wasn't grilled too much on technical knowledge while some friends were needed to explain the algorithm of basic coding questions. About 23 were selected here.
- Round 3: It was the HR round where we were asked standard HR questions, were asked to share some anecdotes relating to our team building experiences and a couple of scenario-based questions as well. About 12 students made it to the final list.

Sources of Preparation
Easy questions on Leetcode, knowledge of C++ STL through any site. Can refer to w3schools for OOP and SQL. Prepare more based on your resume's content. Material provided by PU for aptitude preparation is more than sufficient.

Sector: IT

Name: *Aditya Nawal (2018A3PS0455P)*
Company: Microsoft
Profile: Software Engineer

Recruitment Procedure

- Online test followed by three technical rounds.
- Online Test:
  - 2 questions were there to solve in 1 hour.
  - The 1st question was to detect the error and edit only 4 lines in the code to make it pass every corner/test case possible. (We could not see the cases).
  - 2nd was a question involving 2 vectors who had numbers between 1 and 6. We needed to make minimum changes in the values from either arrays (appended values also between 1-6) to make the sum equal. If the sum can't be wual,return -1. This question also required me to pay close attention to corner cases as test cases were not visible.
- Technical round 1:
  - The interviewer started by asking about me. Then he asked for a solution for implementing a search feature which would output all the names involving the given query upto that moment.
  - The query should be matched with the prefixes of all the string names.I implemented it using Trie.
  - For ex : Aditya Nawal , Nawal , Nadal , Wasim
  - If query is "na" then it should return Aditya Nawal , Nawal , Nadal if query is "wa" then it should return only Wasim (not nawal as this doesn't start with wal)
  - This discussion went for 70 minutes as we discussed various approaches and I kept improving my solution as he was giving me the faults in my solution/hints for a better solution.
- Technical round 2:
  - This guy was a bit senior, and the interviewer started by asking about me.
  - Asked me to divide a linked list in an alternate manner,meanwhile he asked me some questions to confuse me and see how I react. Then he wanted to run it on Ide by taking it as an input and outputting it.
  - He also asked some standard questions such as my strengths,challenges I faced and how I overcame them, about my recent internship.Then he asked me to find a loop in a linked list and middle node in the linked list.
- Technical round 3:

- I never had such fun during an interview. The person was so humble and jolly that the process was very smooth. He had been in Microsoft for 9 years,then joined a startup for 6 years then again went back to Microsoft in his second stint for 6 years.
- He first asked me to write code for reversing a linked list. Then he asked me to do s1-s2. I had to ask them what he really wanted as he framed the question vaguely.
- For ex: s1 ="hello world" s2 = "hop", then I must return "ell wrld" in place. A lot of discussion happened here and finally he was satisfied with the answer.
- I felt in every round they considered the thought process of the candidate, how they are able to catch the hints and how quickly they are able to implement them.

Sources of Preparation
- Leetcode (~450 questions), Interviewbit, GFG Aditya verma for DP (do watch all videos in series to develop a good understanding of how to approach dp questions)
- Codencode for graphs
- Tech dose for understanding standard questions,can't stress enough how underrated that channel is.
- Gate smashers/knowledge gate/5 minutes engineering for CS core subjects

Courses and Certification
DSA, OOP, OS for me. You must be able to talk about every word mentioned in your resume. No certificates as such.

Other Relevant Information
- It does not matter how many questions you do,what matters is how many concepts and understanding you are able to develop.
- Do mark questions which you found tricky or could not do without looking at solutions, and revisit them again and again after some time.
- If possible,find yourself a partner with whom you can discuss questions and new methods everyday.
- Believe in yourself! This is the most important part.Your hardwork and

determination will pay off. Stay cool, calm & composed during the interview and have confidence in your preparation. All the best. If I can make it, you can too!!!

<u>**Sector:**</u> IT

<u>**Name:**</u> *Ashrya Agrawal (2018A7PS0210P)*
<u>**Company:**</u> Microsoft
<u>**Profile:**</u> Software Engineer

Recruitment Procedure

- Online test, 3 Technical Interviews
- Online Test had 2 questions. Cut-off was solving both questions, but not everyone who solved both questions was selected. Probably readability and submission time were also considered.
  - Debug the code provided by changing at most 4 lines, for the nail-hammering problem, similar to one here: https://stackoverflow.com/questions/60953297/find-the-max-value of-the-same-length-nails-after-hammered
  - Find minimum changes required to make the sum of 2 arrays of dice equal. The problem is similar to https://stackoverflow.com/questions/64320448/minimum-time-to-changear rays-to-make-sums-of-two-arrays-equal
- Interview Round 1 was with an Engineering manager from Azure. In my introduction, I mentioned I like Machine Learning and Data structures. As I mentioned Data Structures as my interest, I was asked a question on Binary Trees. I had to write the basic binary tree functions, and then a function to mirror the binary tree.
- Interview Round 2 was with a senior software developer, who straightaway proceeded to the question.
  - Given a matrix of characters, check if it has a given string. The string can either be horizontal, vertical or a zig-zag combination obtained by moving left, right, up, or down at any point.
  - I had to write the class and methods for this question. I implemented a backtracking solution. I made a few mistakes in the base cases, but was able to correct them when the interviewer pointed out (that there is an issue in that specific part of code). After writing the code, I was asked basic questions on object-oriented aspects of code I wrote.
- Interview Round 3 was with a very senior software developer (8+ years in MS) from Azure Global.
  - The question was to subtract string s1 (length m) from s2 (length n) inplace.

- For e.g., S1="hello world" - S2="hop" should store "ell wrld" in S1.
- The challenging aspect was to perform this in Time Complexity - O(m+n) and Space Complexity – O(n), where n is generally smaller than m. I discussed various possible approaches, and their merits/demerits with the interviewer for the first half, and wrote the code in the later half.

Sources of Preparation

Most of my preparation was from the campus courses (CS CDCs) that I took (listed in the next section). I also used Geek for Geeks to get better at the implementation aspect of theory that was taught in courses.

Courses and Certification

CS CDCs: Data Structures and Algorithms, Design & Analysis of Algorithms, Discrete Structures for Computer Science, Object Oriented Programming, Database Systems, Operating Systems.

Other Relevant Information

- Microsoft interviews are different from most other companies. Microsoft focuses on fundamental stuff one learns in courses like DSA, whereas other companies focus on fancy competitive coding questions.
- Don't treat your interviewer as an adversary. They are there to assist you in developing the algorithm and help you in finding edge cases where your solution could possibly fail. And it does not adversely affect your chances if they assist you in finding the edge cases, or even if they try to direct you towards a space optimal and time-optimal algorithm.

Sector: IT

Name: *Harshan B (2018A7PS0166P)*
Company: Microsoft
Profile: Software Engineer

Recruitment Procedure
- Online Test, Interview (3 technical rounds)
- Online Test (1 hr):
  - Conducted on the 'codility' platform. 2 questions were given.
  - One question was to make minimal modifications to an already written code to produce the correct output. The original code had certain cases or edge cases which are not covered.
  - The second question is a normal coding question based on the Greedy approach after sorting the given inputs. The online test was overall easy.
- The interview stage consisted of 3 technical rounds.
- First interview round:
  - I was asked to give a brief description of myself and projects.
  - Firstly, a question regarding Binary Trees was given. The question involved finding if a 'pattern' binary tree exists inside a 'haystack' binary tree, as an exact match. The number of nodes of the haystack tree is always greater than or equal to the pattern tree.
  - After solving the question, I was asked a modification of the previous question. In this case, the 'pattern' tree can be inside the 'haystack' tree in a fuzzy manner (similar to 'ad' existing inside 'abcd' in a fuzzy manner).
- Second interview round:
  - In the second round, I was asked a question about removing the n-th node from the end in a linked list (link). I initially gave a solution which involved 2 passes through the linked list. The interviewer suggested that I look for a solution using only 1 pass.
  - After solving this question, I was asked another linked list question, which is to rotate k nodes from a linked list in clockwise order (link).
- Third interview round:
  - In the third round, I was asked to give a brief description about my summer internship and the work involved there. I was asked about the advantages of the technology used in that project compared to a more traditional counterpart.
  - Then, we had a discussion about my other projects and interests mentioned

on my resume. Then, I was asked why am I applying for Microsoft and what interests me there.

- After this, I was asked a question about designing a DNS cache and the data structure which will be used in the implementation. I provided two solutions and explained the pros and cons of each solution ('trie' data structure approach and a 'priority queue' data structure approach).
- Then, I was asked some basic programming questions like OOP, static and dynamic typing, and the difference between HTTP and HTTPS.

Sources of Preparation

- I followed InterviewBit as a rough guide for learning the topics. I tried to solve at least one question from each bucket from each topic and sometimes solve more than 1 question from a bucket if the questions are popular in companies (InterviewBit shows the companies which have asked the particular question).
- Specific questions or doubts are clarified simply by googling, which often leads to a GeeksForGeeks page. I paid more attention to the Dynamic Programming topic as it is popular among placement and interview online coding tests.
- C++ along with STL was my preferred language for coding. It can be easily learnt simply by googling or by looking at correct solutions in InterviewBit or LeetCode.

Courses and Certification

Data Structures and Algorithms course will greatly improve the quality of preparation for Competitive Coding.

Other Relevant Information

I would suggest having at least 1 or 2 projects on the resume, with some internship work experience. The work done in the Summer internship can be a good talking point for the interviewers.

Sector: IT

Name: *Muluguru Sobhan (2018A7PS0597P)*
Company: Microsoft
Profile: Software Development Engineer

Recruitment Procedure
- Online Test, 3 Technical Interviews
- Online Test : 2 programming questions and the duration of the test was 1 hour.
    - https://dixjty.blogspot.com/2018/09/codility-test-for-nails-hammer-on-hold.html (We were asked to debug the given code and correct it)
    - https://leetcode.com/discuss/interview-question/877070/microsoft-interview-question
- Interview Round 1:
    - The interviewer introduced himself and asked me to do the same.The interviewer was very friendly. Then we moved to problem solving which involved two programming questions.
    - First problem was printing an m*n matrix in spiral manner. I was asked to explain the approach and code the same.
    - Second problem was finding the longest palindromic substring , due to the time constraint I explained only the approach. At the end of the interview, he answered some questions from my side regarding the company.
- Interview Round 2:
    - This round started with two programming questions. First problem was reversing a string word by word.
    - Second problem was converting a doubly linked list into a balanced binary search tree.
    - The interviewer asked me to code and give the time complexity for each question and didn't care about the explanation of the approach. Later we had a discussion on some of my courses like OS and some basics of programming languages.
- Interview Round 3:
    - This round began with a brief introduction of my interviewer and later moved on to my introduction. He went through my resume and asked me about the basics of some courses that I mentioned in my resume.
    - Later I was asked to describe the functionalities in the design of a phonebook application.
    - Then he asked me to write a pseudo code for some of the functionalities

using various data structures. Whenever I got stuck with an issue, the interviewer helped me by suggesting some changes.

- ○ After this, some questions like: Why did you choose Computer Science? What is your dream company?
- ○ At the end of the interview, he told me about the work culture and engineering teams in Microsoft India.

Sources of Preparation

InterviewBit , Leetcode and interview archives on Geeksforgeeks. (Start your coding-problem solving practice on these sites as early as possible. It takes time to get a hang of solving coding questions.)

Courses and Certification

DSA, OOP, DBMS, OS, ML (if you have done projects in this domain)

Other Relevant Information

- ● Don't focus only on writing correct code. It is important to let the interviewer know your approach. Don't be silent. Speak your mind, explain your approach along with the code.
- ● Do go through your resume and be prepared for cross-questions, make sure you have enough knowledge of the courses and domain in which you have done the project.
- ● Look at the past interview experiences of the particular company on Geeksforgeeks and prepare for the interviews accordingly. Looking at some experiences you will understand the pattern of interviews of each company and this might prove to be very critical for last day preparations of the interviews.
- ● Be calm and confident before and during the interviews.

Sector: IT

Name: *Raksha Choudhary (2020H1120261P)*
Company: Microsoft
Profile: Software Engineer

Recruitment Procedure

- Online test followed by three Technical Interviews.
- Online Test: The test consisted of a debugging question and a coding question.
- Round 1: In the first round of interview, he asked me a few coding questions related to trees and asked me to compile the code. Make sure you have good knowledge of the projects listed in your resume
- Round 2: Interview started with "Tell me about yourself "and project discussion.
  - One must be able to explain his project in as much detail as the interviewer expects.
  - Mutex vs Binary Semaphore with the help of real-world examples.
  - Http vs Https. Main focus was on practical applications of the concepts of Operating System, DBMS and CN.
  - Later he started discussing Bit Manipulation with me and asked me 2-3 coding questions related to it.
  - At last, He asked me to design the data structure that can perform push, pop, top and get minimum.
    https://www.geeksforgeeks.org/design-and-implement-special-stack-data-structure/
- Round 3: Interviewer was very friendly. Coding questions were asked from strings and Linked List.

Sources of Preparation

- GeeksForGeeks
- LeetCode
- For CS theory (OS, OOP, DBMS, Networks):
  - GeeksForGeeks
  - Youtube channels like Knowledge gate, takeuforward, Gate Smasher

Courses and Certification

Completed a DSA course from Coding Ninja.

Other Relevant Information

In your resume only mention those things, which you know and can explain to the interviewers, specifically when it comes to projects.

Sector: IT

Name: *Ruchi Batra (2017B3A70629P)*
Company: Microsoft Technology
Profile: SDE

Recruitment Procedure
- Online Test, Resume Shortlisting, Technical Rounds (2), HR Round
- Online test had 2 sections:
    - Code correction – Given a question and the sample code, we have to make the changes in the code (specifically 2-3 lines) to make the code work. Question was based on arrays.
    - We have to write the full solution for the second one. This question was based on Heap Data Structure.
- Around 35 students were shortlisted for the interviews
- Round 1 (Technical Round) –
    - A very simple question on array. Given the sales of 12 months, I have to write a code to find the maximum profit for three consecutive months.
    - My interviewer asked me to share the screen with any IDE on which I am comfortable.
    - He asked me to write the full code with custom test inputs. And parallelly asked to discuss the edge cases.
- Round 2 (Technical Round) –
    - In this round, multiple coding questions were asked, starting with the manipulation of strings. Given a string remove the duplicates characters pairwise so that the result is a string of unique characters.
    - The next question was a standard question of dynamic programming. Given a string, remove the minimum number of characters to make the resultant string palindrome.
    - Next question was, given a large paragraph print the lines with a maximum limit of 50. And the word should not break while changing the line. He wants me to cover all the edge cases, one of them was if the word length itself exceeds the maximum limit, so this will simply give the out of memory error.
- Round 3 (HR Round) –
    - He started with introducing himself and asked me for my introduction. Then we had a great discussion on one of my recent projects.

- He asked what my role was and what all the challenges I faced during my project. He was quite impressed with my answer.
- Then he asked me some theoretical technical questions like what is interpreter language, and how does python and C++ compile. Then he asked me about different memories we used while writing the code. There were few more around these types of questions.
- Then he gave me some team work challenges, and asked me how I would handle these situations. As I had my internship experience, I was able to give good answers to these too.
- He ended by asking if I had any questions for him. I asked him about how it feels to be working in the same company for about 25 years, and if he gets bored doing the same repetitive work. We had a great discussion on that too. With this, he ended the interview.

Sources of Preparation

- Practicing coding questions is the key to crack the placement for any company. Covering all the data structures, and practicing a good amount of questions on each data structure.
- I started with InterviewBit, covering each topic, with the reference of time. Parallely, I started solving daily challenges provided by Leetcode. They were also very helpful.
- For any solution discussion or reference, GeeksforGeeks has a very good explanation of every question. Give a good amount of time on Graphs, trees and DP. Many companies have questions just on these.
- 3-4 weeks before the placement tests, give some time for the contests, can be on Leetcode, Codechef or any platform of your choice. This will ensure you are able to complete all the questions given a restriction of time.

Sector: IT

Name: *Sarthak Sehgal (2017B3A70452P)*
Company: Microsoft
Profile: Software Engineer

Recruitment Procedure
- Online test - Straightforward DSA questions
- Round 1:
  - Number of islands (easy):
    https://leetcode.com/problems/number-of-islands/
  - Merge K sorted lists with no extra space (hard):
    https://leetcode.com/problems/merge-k-sorted-lists/
  - The divide and conquer approach using O(1) space is not easy to get to unless you have seen the question previously. Luckily I had.
- Round 2:
  - Straightforward BFS question. Matrix made up of 0s and 1s. Consider 1s as walls and 0s as paths where a snake can travel. A snake enters from any of the four sides (edges) and can leave at any of the four sides (including the side it entered from). Find out the minimum number of steps it takes to exit. Simply do level order traversal.
  - Semaphore vs Mutex, Process vs Threads, Virtual functions in C++ since I was using C++
- Round 3: General managerial round. Discussion around my past projects, aspirations, CS fundamentals like compiler vs interpreter, etc.

Sources of Preparation
Leetcode

Courses and Certification

- DSA (Leetcode/Interviewbit style questions) is way more important than anything
- Get a good grasp of OS
- OOP principles
- Few companies ask DBS, CompNet

Sector: IT

Name: *Sparsh Kasana (2018A7PS0247P)*
Company: Microsoft
Profile: SDE

Recruitment Procedure
- Online Test: 2 simple coding questions, custom test cases were allowed, final test cases were hidden. Only single submission was allowed for each question
- First technical round: Interviewer asked simple coding questions about matrices. Then proceeded to question me extensively on OS and Networks
- Second technical rounds: Interviewer presented a problem of implementing auto-correct on an input string based on a list of words. I was asked to discuss multiple ways in which I could do the same.
- Technical/Manager round: Another open ended problem of simulating the game of Hangman and what approaches could be used to play it optimally.

Sources of Preparation
Leetcode, Interviewbit, GFG archives of companies for interviews, Codeforces

Courses and Certification
First round had a lot of questions about Operating Systems and Networks.

Other Relevant Information
The interviewers were very friendly and they preferred a discussion about the solution, why I chose that particular way, before the coding part. It's important to be able to clearly express your reasoning about solutions.

Sector: IT/Electronics

Name: *Aditya Karmarkar (2020H1120267P)*
Company: National Instruments (NI)
Profile: Software Engineer

Recruitment Procedure

- **Online Coding Round** - Two problem solving questions, not focused on particular Data Structures
- **Technical Interview Round 1 (panel of 2) - 1 hr**
  - Opened with the introduction of the panel, followed by my introduction.
  - Given a linked list, find the Nth last element.
  - You are given an array. Determine if it's possible to reach exactly the last element of the array by traversing the array such that next_index = prev_index + arr[prev_index].
  - For eg. if arr = [2 1 1 5 6], the traversal would be:
  - Start: arr[0] = 2
    arr[0 + arr[0]] --> arr[2] = 1
    arr[2 + arr[2]] --> arr[3] = 5
    arr[5 + arr[5]] --> out of bound, hence return false.
  - Basic concepts of OOP, the advantages of OOP over procedural programming.
  - What is the fundamental difference/ unique feature of each of these languages- C, C++, Java, Python (since I had mentioned them in my resume). Little discussion on polymorphism, what are types of polymorphism? (compile time/ run time).
  - Discussion on the work that I had done in my previous organization.
- **Technical Interview Round 2 (panel of 2)- 1.5 hr**
  - Opened with the introduction of the panel.
  - Given a 2D array which is sorted both row wise as well as column wise. Develop an efficient algorithm to search any key in the same. This went on for about an hour, as I couldn't come up with a very good solution. They kept giving me hints and in the end, I could somehow do it.
  - Discussion on the work that I had done in my previous organization.
  - If there is some solution to a problem that you have developed better than what your team lead has (and he is not willing to accept it), how would you convince him to adopt it?
- **Managerial Interview (panel of 2) - 45-50 min**

- Opened with the introduction of the panel.
- How was your interview experience?
- Describe some of the challenging situations in any of your projects (in my case, I talked about the organization that I had worked for).
- Your strengths and weaknesses.
- Describe any initiatives that you took up in your life (school/college/office).
- What are your hobbies?
- What are your short term and long term goals?
- What are your areas of interest (if hired)?
- Any plans for PhD?
- Have you heard about NI before?
- Would you accept the offer if we offer you only an internship and not FTE?

Sources of Preparation
- LeetCode 'explore' section for all basic data structures.
- Love Babbar's DSA cracker sheet.
- YouTube channels like Back to Back SWE, FitCoder

Other Relevant Information
- During the interview, it is very important to THINK OUT LOUD.
- You are first asked to discuss the approach of the problem and then code it in any language of your choice (or just a rough pseudocode). Later you are given some examples and asked to dry run the code on it. You will be asked to check if you have missed any test cases.
- Be thorough with the projects mentioned on the resume.
- Cracking the test and the interview both demand a different aptitude in my opinion.
  - Test- 'Speed' is the key which comes with practice. Make yourselves comfortable in the inbuilt APIs of any of these languages- C++ (STL) /Java (Collections) /Python for speedy implementation.
  - Interview- 'Fundamental' is the key. Use the APIs mentioned above as your catalysts and do not make them your dependencies! You might be asked to implement without using any STL/Collections API during your interview- as they want to know your logic building.
- As per my experience, there is no point in passively watching hundreds of videos of LeetCode problems or reading the solutions. Of course, at some point, you

would definitely have to refer to the solution- but make sure you implement it fully after it and more than that, let that reasoning sink in properly.

- Hands-on is a must, especially in the interview, when the interviewer is watching you in real time. In the coding round you can take your time to develop the logic, but in the interview, it becomes quite difficult if you have just skimmed the solution and never coded by hand. (Happened with me in one of the first companies, where I couldn't code a very basic question).

Sector: IT

Name: *Shubham Kumar (2017B4A40882P)*
Company: NCR Corporation
Profile: SDE

Recruitment Procedure
- The process consisted of 5 rounds:
    - Online Round (2 coding question and 20 MCQs on DBMS OOP OS Aptitude)
    - Technical Interview 1
    - Technical Interview 2
    - Manager Round
    - HR round

Sources of Preparation
Leetcode, Geeks For Geeks & Youtube tutorials for Core CS subjects

Sector: IT

Name: *Shwetang Gupta (2018ABPS0502P)*
Company: NCR Corporation
Profile: Software Engineer

Recruitment Procedure

- Pre-placement talk: We were introduced to the company culture and work they do, and it was stressed here to be thorough with OOP concepts especially.
- Coding Round: This round had 2 coding questions based on string, array and hashmap implementation. Besides there were other 20 questions covering OOPS, DBMS, OS, CN. The time limit was 90 min. It was held on HackerRank and Java, C++, C# were allowed.
- Technical Interview 1:
  - The interview started with my introduction and my projects. This company was open to both semester students, and since I was doing my PS2 at Blue Yonder then, I mainly discussed my ongoing projects.
  - I was then given 3 DSA questions and I had to make all the test cases pass on HackeRrank.
  - The discussion further shifted to transversal in trees, OOP concepts, including basics up to multiple inheritance, interfaces. I was then asked some advanced SQL queries and DBMS concepts.
- Technical Interview 2:
  - Similar to Technical Interview 1 but questions mainly revolved around OOP concepts.
  - There was one DSA question in which I was tested on my approach and the interviewer gave hints when stuck.
  - There were also some situation based managerial questions.
- Managerial Round: This round was mainly to check whether I would be a fit in the company. He gave me various team-based scenarios and asked my approach.
- HR Round: There were common HR questions.

Sources of Preparation

GeeksForGeeks, Youtube channels like: take U forward, Aditya Verma, The Code School, Leetcode.

Courses and Certification

OOP, DBMS, OS, DSA.

Other Relevant Information

Please refer to company-specific archives on GeeksforGeeks. There are chances you might get similar questions. Be prepared for real-life examples for OOP.

Sector: IT

Name: *Akshat Jain (2017A7PS0110P)*
Company: Ola Electric
Profile: Software Development Engineer (SDE)

Recruitment Procedure
- Three interview rounds after the initial resume shortlisting had been done.
- Round 1 and 2 were technical while round 3 was HR
- Even in technical rounds, the focus was much more on the projects and internships than anything else.
- We were asked to elaborate on the issues we have faced during our internship, and how we overcame them.
- If we can answer the internship/project related questions confidently, fluently, promptly and in a way that showcases our proficiency with the tools used in them, they will probably not ask you any questions about the fundamentals of computer science (OOP, DSA etc.)
- In round 1, they asked us to rate the skills we have added in our resume on the basis of our proficiency with them.
- A common question asked was, if we said we preferred one programming language over the other, then why. The difference between the two languages was expected.
- Round 3 was focussed more on why we wished to work with Ola Electric and other quality of life questions.

Sources of Preparation
Be prepared to answer all possible questions about your internships and other projects in a way that reflects your knowledge.

Other Relevant Information
- If you have a bad CGPA, you need to be able to explain why it was, and if you are capable of solving the issues which led to that. I was asked to do the same in my round 2.
- Also, it is important to project confidence and a command over the language

during your interview. To prevent events such as stammering, it is key not to stray too much from the truth.

Sector: IT

Name: *Srujana N (2017A7PS0013P)*
Company: Ola Electric
Profile: SDE

Recruitment Procedure
- Resume shortlisting, Interview Round 1, Interview Round 2, HR Round
- Selection was based on the Computer Science branch and Projects listed on Resume. CGPA was not a criteria for selection.
- Questions (inclusive of all rounds):
  - Tell me about yourself.
  - Mention your recent notable achievements.
  - Elaborate on your work/contribution in projects.
  - Some conceptual questions related to Python, C, Java/OOP, Databases
  - No puzzles or Data Structures related questions were asked, rounds were more discussion oriented.
- Recruitment process was fairly easy but Internship experience from Reputed Institutes and Notable Companies was a plus.

Sources of Preparation
- Computer science OOP + DBMS course knowledge.
- Internship experience on back-end development.
- Advisable to go through Ola Interviews + HR Interviews available on any website like GFG or InterviewBit.

Courses and Certification
- C and Java (Object Oriented) Programming
- Database Management System
- Game Theory + Python Certification.

Other Relevant Information

You need to be able to explain your interests and why you want to work with this company. Convince them that you are capable of handling the role being assigned to you.

Sector: IT/FinTech

Name: *Raqeeb Ahmed Khan (2020H1120264P)*
Company: PayU
Profile: Associate Software Engineer.

Recruitment Procedure
- Online test, 2 Technical Rounds, HR round
- Online test was easy and it consisted of three sections:
  - Quant
  - Core CS subjects
  - Coding (2 questions)
- First Technical round lasted for about an hour and it was all coding.
  - It began with a simple coding question (search for an element in a rotated sorted array).
  - Next question started with finding term frequency and then document frequency of a token.
  - In the end the interviewer asked to write pseudocode for a pre-process engine that would precompute term frequencies and document frequencies and there were few questions on how I would handle queries when I am constrained by main memory.
- Second Technical round also lasted for an hour and in this round the interviewer asked me questions on projects which I had mentioned in my resume and he went into great detail regarding every aspect of my projects.
  - He asked me a few questions about OS and Java.
  - In the end he asked me what my favorite app was, to which I replied Youtube and then he asked me how I would go about implementing my favorite feature of Youtube which was the Youtube recommendation system and the discussion on this lasted for about 15 minutes.
- Third round was the HR round which lasted for about 15 minutes and it had basic questions like introducing yourself, why PayU, what are your strengths etc.

Sources of Preparation
Geeks for geeks and Leetcode. Aditya Verma playlist on dp on youtube.

Courses and Certification

There were no questions regarding any certification as such, though having a few certifications would make the resume more attractive.

Other Relevant Information

- Projects are a must. You should have at least 2 projects on your resume as most of the discussion in round 2 was on projects. So you must be thorough with your projects.
- You should have a solid understanding of basic data structures and core CS subjects.
- Interviews should not be like Q&A, make it a conversation.

Sector: IT

Name: *Vijay Kumar (2020H1030118P)*
Company: PayU
Profile: Associate Software Engineer

Recruitment Procedure
- CGPA Criteria: 6.0 in PG
- Online Test, Technical Interview 1, Technical Interview 2, HR.
- Online Test: Test was conducted on Hire pro platform
- Test had 3 sections:
  - Aptitude: Medium level aptitude questions were asked. (15 questions were there.)
  - CS Fundamental: MCQ's from subjects like DBMS, Networking, OS, DS & Algo and Output based questions from C & Java were asked (Total 25 questions were there)
  - Programming: Two questions were of easy level asked and 45 minutes were allotted.
    - First question was we have given two numbers A and B and the next number is the sum of previous two numbers like if A=2, B=3 then 3rd number will be 2+3=5,4th number will be 3+5 so on, we have to generate N such numbers and we have to print first Even numbers than odd numbers in two separate lines.
    - Though the question was easy but many people who were using C++/Java faced the issue in printing the number due to some alignment issue and most of my time was wasted on this question so make sure you don't give too much time on single question because in this case this problem was faced by almost all the people.
    - Second was also an easy level. There was some condition given and you have to count based on criteria so this was just done by using sorting.
- There was equal weightage given to aptitude, CS fundamental and programming so make sure to attempt as many questions as possible with efficiency. 9 people got selected after this round.
- Technical Interview 1:
  - This was conducted on Google Meet. The interviewer introduced himself and shared one Google Doc link and asked me to open any IDE which I have and asked me to share the screen.
  - He just pasted the question and asked me to do the question and he was just interested to see the running code only.

- First Question: Given N numbers, find the total count of subarrays which have an odd sum.
- I gave him first the brute force to generate each subarray and maintaining sum and if it is odd then just increase the count ,he was not satisfied then I gave him prefix sum approach still he was not happy and told me that he wants linear time approach,
- I felt nervous because I had not seen this question before but started trying on paper and somehow I got the approach to maintain the approach to odd sum and even sum and next time if I get odd sum I will increase the count with previous count of even sum, he told me to write the code, I wrote the code and he gave me some test cases and my code was working on his given test cases and he was ok with it.
- Second Question: Given N numbers in sorted order in which each number appears twice and one element appears once we have to return the number which appears once.
- I gave him first Brute force approach then I gave him another approach that we have the array in sorted so I can go linearly and check with its adjacent that it is appearing once or not. He told me to think about another approach. I gave him an ex-Or approach but still he was not satisfied and told me that he wants something less than O(N).
- I started trying on paper and was thinking about binary search but got stuck in making a decision when I should go left and right and I asked him for some hints. He told me that if he gave me hints then the question would be solved.
- I again started trying and somehow I came with some logic which I think was not fully correct. I explained it to him and coded it. He started giving me test cases. I ran the code on those test cases and for some cases it was failing but he was running out of time so he said ok .
- Third Question: Given stack we have to reverse it using recursion. Only push and pop operations were allowed.
- He told me not to explain your approach, just code it within 4 to 5 minutes and I successfully completed the code and it was working for his given test cases.
- 6 People were selected after First Round
- Technical Interview 2:
  - Interview was very cool and he helped me to calm down. He asked me to open a notepad/text editor and asked me to rate myself on DS & Algo and CS Fundamental. I rated myself as average. Remember whatever you rate

yourself you will get the questions according to that only and do justify how you rated yourself.

- He gave me a question in which you are given a binary tree and you have to find the level whose sum is maximum and return that level number. I told him the level order traversal approach and he asked to explain the approach by taking an example and asked time and space which was O(N) so he told me that I want space complexity to be O(1).
- I started thinking and said that we can maintain the height of each node and will use the dfs to get the height of each node and will store it in some array or map which will reduce our space complexity to O (No. of Levels).
- He asked me how I would implement this and finally he told me to just implement your level order traversal approach only so I coded the approach and explained the code by example and he was satisfied.
- Remember he told me to use O(1) space only and I was not aware of this approach but still I tried and gave an approach which was using less space than the earlier solution so just don't give up early and continuously speak whatever you are thinking otherwise he will think you don't know anything.
- Then he asked me to explain my project and asked me some basic questions related to the project. Then he started asking about my work experience and gave me a scenario and asked which algorithm you will use here, in short it was related to tasks which have dependencies so how you will identify which task to be done before so I told him topological sort.
- Now he came to the questions on CS Fundamental like what is Normalization, ACID Properties, MVC architecture etc. and at last asked me why PayU.

- 3 People Selected after This Round.
- HR Interview:
  - Interviewer introduced himself and told many things about the company and projects.
  - He started asking me behavioral questions like explain me the situation when you were not able to meet the deadline, what will you do when you are working with peer and he is not satisfied what you want to do and he has some different views or idea, what do you mean by scalability and how will you make your system scalable, Difference between Microkernel and Monolithic kernel and why your company should go with microkernel and why not.

Sources of Preparation

450 DSA Sheets by Love Babbar, GeeksforGeek, Leetcode for questions discussion, Object oriented Programming with C++ by E Balagurusamy for OOPs concept, Interview bit blog for OS, CN, DBMS top interview questions.

Other Relevant Information

There are ample amounts of free resources available on the internet and would strongly recommend just sticking with one thing and completing it fully. Don't deviate if your friend is doing an interviewbit or some other thing; more or less all the questions in every resource are the same. I am listing some resources which benefited me and I used to refer to for clearing some concepts:

- Aditya Verma on YouTube specially for DP.
- TechDose YouTube Channel.
- Leetcode Discussion for particular questions to understand the proper approach and how to come up with the solution, it helps a lot.
- Leetcode Contest (You can give the virtual contests any time, it helps in doing time management and gives confidence that you can tackle the new questions.)
- Tushar Roy YouTube.
- Pepcoding YouTube.

Sector: IT.

Name: *Keval Kulkarni (2020H1120292P)*
Company: PegaSystems
Profile: Software Engineer

Recruitment Procedure
- Online Test, Technical round, Manager round, Director round, HR round
- Online test had two sections :
  - MCQs which are of GATE level and some Java's OOP related questions.
  - 3 coding questions which were of medium level.
- Technical round :
  - Tell me about yourself.
  - Brief discussion about projects.
  - Questions related to my previous work experience.
  - A puzzle: Bag of Coins
  - Coding question : To detect if there is a loop in a Linked List and remove it
  - Coding question : To reverse a Linked List.
- Manager round :
  - Basic technical questions.
  - Discussion about projects.
  - Coding Question :Find a pair with a given sum in BST.(Optimized Solution)
  - Situation based question:Suppose you are working on a task (which has a deadline) and your manager is unaware about the same and assigns you another task (to fix a bug on urgent basis). How will you handle this situation?
- Director round :
  - Tell me about yourself.
  - Quick overview of previous rounds.
  - Detailed discussion about the project

- HR round:
  - Discussion about my academics and family background.
  - Why this company?
  - Would you be fine with relocation?
  - Tell me the programming language you consider as your strength and will you be fine in switching to another language if you join the company.

○ Finally he asked whether I had any questions for him.

Sources of Preparation
- Coding questions from GeeksForGeeks, Leetcode (easy and medium level), InterviewBit.
- Striver SDE sheet, Love Babbar 450 sheet
- Basic GATE Notes for OS, DBMS, CN.
- OOPS Concepts and examples.
- For Puzzles, refer to the puzzles page on GeeksForGeeks.

Other Relevant Information
Be confident while answering in the interview. Interact with the interviewer (on technical aspects) as much as you can.

Sector: IT

Name: *Parth Pandya (2020H1120287P)*
Company: PegaSystems
Profile: Software Engineer

Recruitment Procedure
- Online test, technical round, managerial round, director round, HR round
- Online test consisted of some MCQs based on CS and OOPs concepts. Apart from that there were three coding (Medium level) questions. Try to solve at least two out of three coding questions.
- Technical, managerial and director interview rounds were on the same day.
- In the technical round interviewer asked me two coding questions:
  - One was to reverse the string but without changing the position of special characters.
  - Second question was to detect a loop in the linked list.
  - Some questions from Java on topics like exceptions, threads and OOPs.
  - One standard puzzle question was also there (https://www.geeksforgeeks.org/egg-dropping-puzzle-dp-11/).
- Managerial round was a technical round only. Interviewer asked me to reverse the string in the most optimized way. Discussion on the project technologies and some questions on that topic. There was one puzzle in this round too.
- Director round was more about cultural fitment of the company. Most of the questions in this round were based on resume only. Discussion on trending technologies. Questions like the most challenging thing you coded were also there.
- HR round was a telephonic discussion with HR. There was a discussion on the family background and cultural fitment to the company.

Sources of Preparation
- DSA 1 by Anuj bhaiya series on Youtube for the coding practice and Java collection framework video from the same channel.
- GFG must do questions

Courses and Certification

If you have some it will help otherwise it doesn't matter much

Other Relevant Information

- Try to give a good approach for each question on coding as well as puzzles. Having a good approach will help you as equal as having the actual answer to the question.
- Wherever you get stuck with the question, discuss your thinking with the interviewer. They will help you by giving you hints. The Interviewers were very helpful.

Sector: IT/Analytics.

Name: *Achyuth Anand Tadepalli (2018A7PS1117P)*
Company: PharmEasy
Profile: Data Scientist

Recruitment Procedure

- Resume Shortlisting, Online Test, Technical Interview, Hiring Manager Interview
- Test had 30 MCQ questions based on Data Science/ML concepts, SQL, Statistic and Aptitude
- Test was easy if you have read the basics of each of the topics it was based on
- Technical interview questions:
  - Introduce yourself along with followup questions
  - Further questions about a project, course or internship mentioned on the resume
  - Basic SQL statements, I knew Python, so was asked to rewrite the same in Python
  - Basic ML theory
- Hiring Manager Interview:
  - Introduce yourself along with followup questions
  - Situational based questions related to business decision making - focus was on the thought process rather than a right or wrong answer.
  - Situational based questions had many follow ups by changing the situation slightly each time.
  - Asked me if I had any questions at the end of the interview

Sources of Preparation

Reading through Data Science question archives.

Courses and Certification

Nothing specific, however, courses based on Machine Learning, Neural Networks and other related subjects is a bonus.

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Other Relevant Information

- In addition to Data Science related courses, projects on ML or other Data Science models is also a big bonus.
- Being able to confidently explain your projects is more important than making the project sound big.
- Being confident in your responses while being concise is the most important thing to keep in mind when sitting for an interview. The recruiters are there only to accept you rather than reject you.

Sector: IT

Name: *Ayush Kumar (2017B5A70761P)*
Company: PharmEasy
Profile: Data Scientist/Analyst

Recruitment Procedure
- Resume shortlisting, Online Test, Technical Interview, Hiring Manager Interview
- Online Test: The test was hosted on Hackerearth and consisted of 30 MCQ questions to be solved in 1.25 hours. The test consisted of basic ML, SQL, statistics and data interpretation questions.
- Technical Interview:
  - The interview started with basic questions on SQL query. Then the interviewer asked about different ML algorithms followed by an in depth discussion about working of decision tree, random forest, bagging and boosting.
  - Then he asked me about different libraries I'm familiar with and then to write some simple programs in Python (factorial and printing some particular patterns).
  - Then he asked about different metrics of performance for binary classification, and to further explain ROC curve and confusion matrix. The interview ended with a simple puzzle.
- Hiring manager Interview:
  - This round started as quite a relaxed one. He asked for my introduction then discussed my PoRs and other activities that I was involved in when I was on campus.
  - Then he asked to explain my summer internship project where I worked on the Data pipeline in MLOps.
  - He then discussed my projects on deep learning in depth and asked questions about the architectures used and application of my project in real life.
  - Then he gave a case study:To decrease customer churn from a platform using the user's usage and transaction data from the app. It involved choosing the right data pre-processing and choosing the right architecture to find an underlying pattern in the data and then make a prediction.
  - Then he asked some simple questions on probability and statistics and some puzzle type questions.

Sources of Preparation
ML Lecture Slides and Kamlesh sir's ML lecture videos on YouTube, GFG, Javatpoint

Courses and Certification
ML certification and Deep Learning Specialization on Coursera, ML elective on campus, Prob & Stat

Other Relevant Information
Be confident with your answer and approach, ask the interviewer if additional details are required in a question.

Sector: IT

Name: *Lokesh Soni (2020H1120285P)*
Company: PharmEasy
Profile: Software Engineer

Recruitment Procedure

- Coding Test ->Tech Interview -> HMR
- Coding Test : 1 Coding question of medium to Hard difficulty and 4 MCQ in 1 hour.
- Tech Interview:
  - Minimum candies problem (wrote complete code on google docs).
  - ZigZag Traversal of BT (wrote complete code on google docs).
  - Standard subject questions.
  - A puzzle.
- HMR:
  - Resume and project focus (I had 4 projects in my resume).
  - Questions on internship and work experience.
  - Standard Puzzles.
  - Situational questions.
  - HR questions.

Sources of Preparation

LeetCode, GFG interview experience, InterviewBit

Other Relevant Information

Prepare DSA. Have development experience in projects and be thorough with it.

Sector: IT

Name: *Mansi Mittal (2017B1A70991P)*
Company: PharmEasy
Profile: Software Engineer

Recruitment Procedure
- Online Test: The online test had two components
  - MCQs: These were Computer Science coursework based questions, covering DSA, OOP, DBMS, and OS.
  - Programming: The programming question carried the most weight in the test. Most languages were permitted for the same.
- Technical Round: This was a purely DSA based round, I was asked to find time complexities and to code an optimal solution to a given problem.
- Technical/Manager Round: This round consisted of resume and project discussion, challenges faced in projects, questions on OS and DSA concepts.

Sources of Preparation
Leetcode, Geeksforgeeks, CodeForces for practicing programming. Revising CS course notes for DSA, OOP, OS, DBMS also proved to be helpful.

Courses and Certification
CS CDCs should be prepped and revised well

Other Relevant Information
Make sure you know about the company and leverage that knowledge to ask questions and prove how you can be a good fit.

Sector: IT

Name: *Ravindra Kumar Sharma (2020H1030126P)*
Company: Pharmeasy
Profile: Data Science

Recruitment Procedure
- Written Round:
  - 30 MCQs
  - Time: 1 Hour 15 mins
  - Platform: Hackerearth
  - Around 5 questions were on basic Python programming
  - Around 5 -8 on Machine Learning
  - 5-8 Aptitude questions
  - 5-6 SQL questions
- 2 Interviews: 1 Technical, 1 Hiring manager + technical
- Round 1:
  - Interview started with basic questions on SQL queries and then on basic Python syntax, he just wanted to know my proficiency in both.
  - Then an easy coding question was asked to count the number of words in a string.
  - After this, the main part was started to check analytics and feature engineering skills .
    - You are the owner of a T-shirt Shop at a Mall: What factors will you keep in check to increase your sales? As discussion followed where we both put forward some features we need to monitor, the interviewer was very helpful.
    - You have created a startup like Byjus which is targeted for students from class 8th to 12th and only for preparation of medical exams. Then lots of questions were asked, like: How will you estimate the number of students in a city? How will you find your target audience?
    - Then he came to the project and asked some questions, like: Why did you choose this algorithm ?
    - Last question was: You are tasked to minimize the number of replacement clothes due to size issues at Myntra. He was looking for a recommender system based approach - I gave him that and he was happy with it.

- Round 2:
  - This was Hiring Manager Round, General discussion on resume and then discussion followed on time series analysis.He gave me a problem that they are working on to manage their warehouse with quantity of medicines, we discussed on modeling it using LSTM a long discussion followed on this problem.
  - Then a guesstimate question on the number of flights currently flying in India. He wanted a whole analysis and then wanted a number. He helped me with this.
  - Then another question was asked on string prediction and diagnostic test prediction, optimizing search using machine learning algorithms, then he asked some questions on algorithms, and their equations.
  - One or two behavioral questions were asked related to higher studies, and why Pharmeasy.
- No HR round was there

Sources of Preparation
- Applied AI Course
- Andrew N.G. Course
- Interviewbit for coding practice

Courses and Certification
- Andrew N. G. Machine Learning Coursera
- Deeplearning.ai
- Machine learning or Data Mining course is enough

Other Relevant Information
Just don't lose hope , you will face some rejections in this placement process , keep working hard you will get job for sure

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Sector: IT

Name: *Shalu Sinha (2018A3PS0432P)*
Company: PharmEasy
Profile: Data Scientist

Recruitment Procedure

- The process for both Data Scientist and Data Analyst was a common one. The profile was specified at the end , when the company had narrowed down to the final selects. The eligibility was -
    - Discipline – CS/EEE/EnI
    - CGPA cutoff – 6.5
- There were 3 rounds in the process – An online test and two interview rounds, all of which were eliminative
- Online Test:
    - Conducted on Hackerearth – 30 MCQs, to be solved in 1 hour.
    - Questions were based on Python, basics of ML and statistics and a good amount of SQL.
- Interview Round - 1:
    - The interviewer was an analyst from the firm and the round approximately went about for an hour. For each question, we went about discussing how to solve it and what my approach would be.
    - My questions could be segmented into – Maths, SQL , Python and ML.
    - For Maths, I was asked to solve a puzzle based on P&C, can be found here.
    - For SQL, I was asked a few questions on inner/left joins and had to write one/two queries as well.
    - Python questions were mostly around manipulating data with data frames.
    - ML questions were basic but focused specifically on algorithms and metrics. An example would be – I was asked about the algorithms I was familiar with, and I answered Regressions, SVM, etc. So, then my next question was about Logistic Regression – Why is it called Logistic Regression if it is used for classification purposes.
- Interview Round – 2
    - This was with a Hiring Manager and was mostly centered around my projects and resume. This again went around for an hour.
    - The starting point of the interview was my summer internship and the kind of work I did there and then it moved to another previous internship which was in the domain of ML Research.

- We then moved forward to projects, and I was asked to explain the idea behind it and the methodology. These were all ML/Deep Learning/Image Processing projects.
- A very specific question that I was asked later was related to PharmEasy's method of digitizing prescriptions and what optimizations or improvements could be made into that.

Sources of Preparation

- I did not really prepare specifically for this role; my preparation was more in general towards the IT sector. The online test was easy, although lengthy, so any kind of practice with the aptitude test would come in handy.
- However, a day before the interview I went through everything I had there on my resume, so that I could explain it.
- Additionally, knowing Python and SQL is a very big plus. I was not very well versed with SQL but had some exposure to it due to my summer internship.

Courses and Certification

- Neural Networks and Fuzzy Logic
- Discrete Mathematics
- Again, I did these as electives and they helped from a knowledge point of view, not sure of anything other than this.

Other Relevant Information

- Always be genuine about your skills. I clearly mentioned about not being good with SQL, and hence I think I wasn't asked very difficult questions about it.
- Be sure to interact with your interviewer. If you're working on a question, speak out your approach and how you are trying to go about solving the question. The interviewer will often validate your thinking and help you if you're stuck. In my first interview I was stuck at various places and my interviewer gave me a lot of hints to move forward.
- My second interview likewise was entirely like a conversation. I was also asked if I had published any papers or was considering going for higher studies or was looking at other job profiles.

- Towards the end, the interviewer might ask you for your questions, think of these questions before you go into that interview.

Sector: IT

Name: *Chinmay Gosavi (2020H1120262P)*
Company: Qualcomm
Profile: Software Engineer

Recruitment Procedure
- Resume Shortlist, Online Test, 2 Technical Interviews, HR Discussion
- Online Test:
    - Aptitude - Percentages, Time-Work, Ratios, Probability, Bar Graph - Data Interpretation, Arrangement type of Logical Reasoning question.
    - Programming – Find Output of Program, Find Error in Program type of question. Main Topics – Pointers, Recursion, Arrays, Macros, etc.
    - Technical – Basics of OS, CO, OOPS, DSA, some programming questions.
- Technical Round 1 –
    - I was asked to introduce myself briefly.
    - I had mentioned my interest in RTS, so the discussion started with scheduling. Some of the topics covered were basics of scheduling, types of scheduling, context switches, process states, swapping, etc.
    - Focus was given on what exactly happens when a context switch happens. Some basic processor related questions (responsibilities and components) were also asked.
    - Questions regarding my previous work experience (Software Engineer at Harman) were asked as they were relevant to the profile. Mostly the interviewer enquired about the projects I worked on and asked some questions regarding what alternative methods can be used instead of the one I talked about.
    - One programming question related memory allocation where the gist was whether it's possible to get memory at a specific address. I gave an approach after which the interviewer modified the question slightly, and I was able to give another approach. I wasn't asked to code it up as we were out of time.
- Technical Round 2 –
    - No introductions this time, we just greeted each other and the interview started. Again, the discussion started with RTS – difference between RTOS and normal OS. I gave a few basic differences.
    - I was asked about the nature of work I used to do in previous work experience, I said that I mostly worked on the application side in the

Vehicle Infotainment domain.
- ○ The interviewer asked whether I have worked on lower layers than application layer (device drivers, etc), to which I informed I haven't worked a lot on those. The interviewer then decided not to question me on those topics.
- ○ We had a discussion about what happens in the compilation process of a C program. I was asked about difference in program, thread, process as well as methods of ensuring synchronization of process.
- ○ Then a simple stack vs queue question was asked after which the interviewer moved to OOPS basics. I was asked to explain polymorphism in detail – both verbally and via code. After the explanation I was asked how polymorphism internally works.
- ○ A puzzle of 3 Liter, 5 Liter and 8 Liter Jar (filled) was asked – divide the water in an 8 liter jar into 4 and 4. After this some coding questions were asked. Majority were related to bit manipulation (starting from basic and then increasing difficulty), checking endianness, etc.
- HR Round: No HR round was held, I was simply informed via phone that I was selected, and my team and location. My GATE rank was also asked and whether I'd be accepting the offer. Call lasted less than 5 minutes.

Sources of Preparation
- For the test I prepared mostly from Indiabix, GeeksforGeeks.
- For technical rounds prepare from GATE notes of OS and CO subjects. For programming, preparing from GFG will be enough.

Courses and Certification
- I had selected Real Time Systems (RTS) and Software for Embedded Systems (SES) as electives which helped me a lot in the interview.
- No certifications were expected as far as I know.

Other Relevant Information
- Keep on talking in the interview and explaining your thought process, even if you feel that the answer might not be entirely correct.
- My previous work experience was in a company which worked on similar topics (Harman in Automotive domain), this helped me in the interviews.

- Knowledge of C and C++ is important for the company so prepare well in these topics.

Sector: IT

Name: *Mantri Sai Ratna Kashyap (2020H1120305P)*
Company: Qualcomm
Profile: Software Engineer

Recruitment Procedure

- CGPA > 7 profiles, Online Written Test, two technical interviews, one Hiring Manager interview.
- Online Written Test had 3 sections:
  - Aptitude Section: Majority of the questions were on Data Interpretation, Percentages. Few were on Speed and Distance, basic geometry.
  - Programming Section: Many questions were on basic C programming on pointers, strings and arrays, given code snippets finding errors and output. Basics of Digital Logic and OS were tested.
  - CS Section: Similar to earlier section but focus was more on OOPS, OS, COA and DLD concepts along with some basic C Programming questions.
  - Sectional cut-off, $1/4^{th}$ negative for incorrect answer. Test was relatively easy.
- Technical Interview-1:
  - Introducing myself.
  - Programming questions on Dynamic memory allocation, Handling pointers, LinkedList and its variations, one question on DP.
  - Questions on resume and projects done.
  - This round lasted for about 1 hour.
- Technical Interview-2:
  - Introducing myself.
  - Started off with basic concepts of C language like Storage classes, Dangling pointers.
  - Coding questions on Bit Manipulation, String Manipulation, Some standard C programs.
  - Concepts and programming questions related to OS, COA and DLD.
  - About my past working experience and projects.
  - The interview concluded with some behavioural questions in the end.
- Hiring Manager Interview:
  - Many of the candidate had Hiring Manager round but I was shortlisted based in two technical rounds itself.

Sources of Preparation

GeeksForGeeks, LeetCode, GATE Notes and Aptitude concepts from IndiaBix.

Other Relevant Information

Unlike others who focus on Data Structures and Algorithms heavily irrespective of the kind of work they are offering, Qualcomm interviews were wholly dependent on the roles and teams they are hiring for.

Sector: IT

Name: *Papai Ghosh (2020H1120289P)*
Company: Qualcomm
Profile: Software Engineer

Recruitment Procedure
- The whole recruitment process was online, first we had an online written test followed by 2 technical interview rounds and then an HR interview.
- The test had 3 sections:
    - General Aptitude , Technical aptitude, Programming Basics.
    - The General aptitude section had some time consuming questions.
    - Technical aptitude majorly included OS, DSA, CO related MCQs.
    - Programming section had code output based questions on C and basic concepts of OOP MCQs.
- In the first round of interview, mostly the questions were from Pointers and OOP related concepts and few questions were asked from OS. Before the start of the interview, the interviewer briefed about the role. One coding question was given and I was told to figure out all the edge cases where my code might fail. The interview round lasted for 1 hour.
- In the second round, the interview started with project discussion. Then the interviewer asked many questions from OS. After that I was asked three coding questions. One coding question was from array and other two questions were from LinkedList. This round also lasted for 1 hour.

Sources of Preparation
- Solved 200+ questions on GeeksForGeeks and 100+ questions on LeetCode
- Past interview archives on GeeksForGeeks
- For CS theory (OS, OOP, DBMS, Networks):
    - GeeksForGeeks
    - Youtube channels like Knowledge gate and Gate Smashers

Courses and Certification
Completed a DSA course from Coding Ninja.

Other Relevant Information

- In your resume only mention those things, which you know and can explain to the interviewers, specifically when it comes to projects. Do not mention any project you have little or no idea about.
- As per my experience, the interviewers are there to help you out. If you are stuck at some point, express what you are feeling. Always remember the interviewers focus on your logic rather than just focusing on the final solution.
- Go through interview experiences and PU chronicles before your interview to find out the important subjects and questions asked in the interview.

Sector: IT

Name: *Souveek Pradhan (2020H1120268P)*
Company: Qualcomm (Software systems)
Profile: Software Engineer

Recruitment Procedure
- Resume Shortlisitng, Online test followed by 2 Technical interviews
- Resume Shortlisting**:** All students with CGPA above 7 were allowed to apply.
- Online Test:
  - It had 60 MCQ questions divided into 3 sections with each section having 20 ques. 30 mins was allocated for each section.
  - Section 1- Aptitude - Basic aptitude questions studied for GATE. It also included DI/LR and passage based questions.
  - Section 2- Questions from OS, CN, DBMS and DS were asked. Questions like height of tree, binary search tree, Balance value of avl tree node, min heap, Turn around time/ avg waiting time in scheduling algo.
  - Section 3 - C Programming questions based on pointers, storage classes, input-output, static variables
- Technical Interview 1-(45 minutes)
  - Introduction, followed by work done in the company.
  - Then started with a basic C question- finding avg of 2 numbers. From there it moved on to concepts of precision loss and overflow. All the changes were being monitored by the interviewer.
  - Counting number of set bits (bitwise operation).
  - Linked list- create, delete
  - OS questions based on Mutex, Semaphore, difference between them and deadlocks
  - Puzzle question - Given 3 jugs - 3, 5 and 8 litres with 8 litres filled with water, divide into 4 litres. Link to solution.
- Technical Interview 2-(45 minutes)
  - Introduction and previous work
  - Programming question based on malloc - WAP to allocate x Bytes of memory, such that the address returned is divisible by 4. The interviewer helped a lot through each and every step while I tried to solve the problem.
  - OS based questions on scheduling algo, mutex , semaphore. Also wanted to know about Peterson's solution.

Sources of Preparation
- Practiced coding problems from InterviewBit and GeeksforGeeks.
- Also, problem solving and mock interviews with friends helped a lot.

Other Relevant Information
- Never give up on a question during the interview. Even if you don't know, ask for hints. In most cases the interviewer will help you as they are evaluating your PSA. Sometimes they may give difficult questions just to assess your analytical skills.
- Don't get bothered by the interview experience of others. Take the positives from each and build your confidence.
- Thinking out loud during the interview will help a lot.
- It is expected to have a good hold on DS and algo. So practice a lot. Studying in groups will ease the process.

Sector: IT

Name: *Srishti Keshari (2020H1120266P)*
Company: Qualcomm
Profile: Software Engineer

Recruitment Procedure
- Online Test, 2 technical Interviews, HR Round
- The Online Test had three Sections - General Aptitude(Quant, DI, LR), Programming MCQs(Mainly C/C++ output questions, detect errors), Core Subjects (OS, COA, DS, OOP etc).
  - Total Duration – 90 minutes
  - Each section had 20 questions and 30 mins to complete. Section switching was not allowed.
- Technical Round 1:
  - Introduction, brief discussion about projects.
  - Discussed about memory layout in C, how is memory allocated, which memory is used for which type of variables and some other related questions. Asked to demonstrate how heap and stack grow, through code (Basically two stack implementation). Ran some cases to show different conditions.
  - 3 coding questions (based on Arrays and 2 based on Bit Manipulation). Complete running code was expected (hackerrank platform was used for coding questions).
  - Questions on OOP concepts. Gave a scenario and asked what classes I will use. Asked to show an example function Overriding with code. Some other questions on RTTI, Static and Dynamic Cache.
  - One puzzle – find distance travelled by a bee between two trains moving in opposite direction(among first few puzzles on GFG)
- Technical Round 2:
  - Detailed Discussion about projects. Asked questions regarding the projects and internship work. Challenges and learning outcomes from the projects. Asked to share screen and run one of the projects.
  - Coding Questions – Divide an array into two subsets such that one has sum just greater than the other subset, 3 Sum Problem, 1 Tree based question.
  - Puzzle 1 - Measuring some particular time using two hourglasses.
  - Puzzle 2 - Given 3 boxes, one has Apples, one has Oranges, one has both Apples and Oranges. They are labelled incorrectly. Find the number of

fruits to be picked to determine correct labels.
   ○ Duration of technical rounds was around 1 hour 15 minutes.
● HR Round: It was not a proper interview round, the HR just called and asked a few general HR questions and told about location and team allotted.

Sources of Preparation
Interviewbit, Leetcode, GFG

Sector: IT

Name: *Tejasva Singh (2020H1120280P)*
Company: Qualcomm
Profile: Engineer (Software Profile)

Recruitment Procedure
- Shortlisting based on CGPA ‑ 7 and above.
- Online test consisting of 3 sections:
  - Aptitude
  - Basic C programming questions like predict the output of the given code, find the mistake in the code etc.
  - Theoretical questions based on Operating Systems, OOPS, DSA and C language keywords.
- 2 technical interviews of 1hr each:
  - Both the technical interviews had similar types of questions. I was first asked if I was comfortable writing programs in C. I was expected to write working codes in Hackerrank's online compiler and also had to explain my approach in a whiteboard/MS Paint.
  - The programming questions were mostly from DSA (Linked List, Stack etc). There were some questions on Bitwise operations and a lot of questions were asked on pointers.
  - Then there were some theoretical questions from the OS and a simple puzzle. There was also some discussion on my project.
- HR Round: The HR round was held over a phone call and did not last more than 2‑3 minutes. I was told the location that would be assigned to me and was asked if I was comfortable with it. Also, some other basic details were provided.

Sources of Preparation
- Must do Questions – GeeksforGeeks
- Qualcomm Archives – GeeksforGeeks
- Aptitude ‑ IndiaBIX

Other Relevant Information

The Interviewers were very friendly and were trying to help wherever I got stuck. So, feel free to ask them for hints. They were more interested in the approach rather than the solution.

Sector: IT

Name: *Utkarsha Bagade (2020H1030139P)*
Company: Qualcomm
Profile: Software Engineer

Recruitment Procedure
- Online Test: The test was divided in three sections of 30 minutes each (Total 1.5 hours).
    - 1st section – Consisted of aptitude and logical reasoning, level was easy.
    - 2nd section – MCQs on C programming. Tested our knowledge of pointers, keywords, and other basic concepts. Focus on fundamentals.
    - 3rd section – Computer science basics. Focus was on OS, DSA, CO.
- Round 1: 4-5 coding questions - Print a specific pattern, questions on bit manipulation, Questions on string like Reverse words in given string. Basics of Digital Logic, Operating Systems, Data Structures were asked. Do not let the screen sharing increase your nervousness. Interview is more like a discussion if communicated comfortably.
- Round 2: Interview started with 'Tell me about yourself'. It is advised to go through your resume once before the interview. One must be able to explain the projects in as much detail as the interviewer expects. 2 coding questions were asked – Linked list and strings. I was asked to compile the code and show the result on the spot. Some questions on OS, Computer Organization (Cache, Memory), Linker/Loader were asked.

Sources of Preparation
- GFG, Leetcode.
- Gate notes for CS fundamentals and Aptitude.

Other Relevant Information
Reading about the interview experience of others on platforms like GFG before the online test/interview might help as we get an understanding of which subject the company focuses on and the pattern on examination.

Sector: IT/ FinTech

Name: *Arko Jyoti Shith (2020H1030117P)*
Company: Q2ebanking
Profile: Associate Software Engineer

Recruitment Procedure

- Pre-Placement Talk, Online MCQ+Coding Test, Group Discussion, Technical Interview, Managerial Interview, Human Resource Interview.
- Online Test:
  - MCQ section: Easy to medium level difficulty (Not harder than GATE) questions of C/C++ (Programming, Data Structures), Java, Object Oriented Programming, Operating Systems, Database Management System.
  - All MCQs were single choice correct. Aptitude questions of literature comprehension and profit/loss calculation were present.
  - Coding section: Upto Medium difficulty of "GeeksForGeeks", "LeetCode" questions.
  - Test was easy. Sections were switchable. Test was taken on HackerEarth and was of length 1 Hours.
- Group Discussion:
  - It was amongst 6 candidates with 3 observers. It is important to speak crisp, clear and concise points.
  - Being polite, helpful while being simultaneously prompt and confident is also a very important factor.
  - Topic was: "From Aadhar to Facebook, how much is our data safe?"
- Technical Interview: Write C/C++ code for:
  - "Kth Smallest Number in a binary Search Tree". First approach by using array , second approach without array. Interviewer was satisfied with the solution presented.
  - "Merge two sorted arrays". Interviewer was satisfied with the response.
  - "Find missing natural numbers in a long list ($>10^{12}$)of natural numbers". Pseudocode was satisfactory for the interviewer.
- Managerial Interview round consisted of discussion of topics, projects etc. As mentioned in the CV/Resume submitted. A major part of the discussion was on topics/subjects studied in the M.E course in BITS Pilani

- HR round was basically gauging and identifying my attitude towards life in general, and how it would translate to my profession/career. I asked about the CTC breakup, future scope of my work , general working of the company and possible future.

Sources of Preparation
- GeeksforGeeks Last minute Notes on OS, DBMS, OOP, Data Structures, Programming Basics.
- "Interview collection" on Leetcode of Easy and Medium difficulty.
- GeeksforGeeks: Easy and Medium difficulty questions
  https://www.geeksforgeeks.org/must-do-coding-questions-for-product-based-companies/

Courses and Certification
No subject as such. However it is important that only topics/subjects with which familiarity is very high be mentioned in CV/Resume especially for R2 (Managerial Round).

Other Relevant Information
- Your problem solving capability as well as attitude towards solving problems is noted by interviewers.
- A positive attitude towards learning forever and chasing after your objective without losing sight of your surroundings is generally looked at with a positive view. This helped me tremendously in the HR round.
- It is not necessary to give a perfect answer. However there should be no doubt in the Interviewer's mind that you gave your best and your basics are sound.
- Length of Interview is no measure of your performance.
- In any case of doubt regarding any query from the Interviewer, do not hesitate for further clarification.
- Your spoken English may not be perfect, but your intent must be clear.

Sector: IT/FinTech

Name: *Divyanshu Varma (2020H1120284P)*
Company: Q2ebanking
Profile: Associate Software Engineer

Recruitment Procedure

- Written round - About 10 MCQs with 2 relatively easy coding questions.
- Group Discussion - 12 students selected from the written round scores participated in a group discussion in two groups of 6 students each.
- Technical Round - Those who qualified the group discussion went on for the technical round. The questions asked were relatively easy, but gradually increased in complexity. The approach to the problem was more important to the interviewer than knowledge of a particular language.
- Managerial Round - This was the toughest round for me, and I was asked questions from my resume and had to explain the projects mentioned in it. I was also asked about my electives as mentioned in the resume, and asked about caching. Then I was asked how I would design a cache. There were also questions about why to choose FinTech over others. So it was a mix of Technical and HR rounds.
- HR Round - This was a very informal yet very tricky round. I was very casually asked the questions but in a disguised manner. Paraphrased, some of the questions were:
    - "How would you describe yourself now vs 10 years ago?"
    - "Are you willing to work here for a long time?"
    - "How do you manage conflicts?"
    - "How would you rate us?"

Sources of Preparation

- Practice questions on LeetCode. There is a LeetCode official list of 100 interview questions classified from easy to difficult. I managed to do about all easy and about 30% of the medium questions on my own in the limited timespan I had.
- If possible, also check out HackerRank's interview preparation kit.

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Courses and Certification

- Android Developer Nanodegree by Udacity
- Joy of Computing Using Python by NPTEL
- 5 stars in C and C++ questions on HackerRank

Sector: IT/Fintech

Name: *Naman Chokhani (2017B3A70726P)*
Company: Q2eBanking
Profile: Associate Software Engineer

Recruitment Procedure

- Online Test, GD, Tech Interview, Managerial round, HR round
- Online test had 2 coding questions and a few MCQs based on CS core concepts like OOP, DSA.
- GD was chill. Tech round had proper DSA CP questions. Make sure to have strong basics on Data structures, time complexity, common algos etc. Also, some Java questions on important topics like multi-threading etc.
- MR was based entirely on stuff on your resume. Make sure to prepare that well in advance.
- HR was filled with typical HR (strengths / fears / weakness etc.) type questions.

Sources of Preparation
Leetcode, Hackerrank, GFG for core CS.

Courses and Certification
Demux DSA course.

Other Relevant Information
Be confident about the stuff in your resume. Also, I was asked about any personal projects I had outside of work/acads.

Sector: IT

Name: *Rohit K Bharadwaj (2017B4A70633P)*
Company: Q2ebanking
Profile: Associate Software Engineer

Recruitment Procedure
- Written Test, Group Discussion, Technical Interview, Managerial Interview, HR Interview
- Written Test had two sections; time limit was 1 hour:
  - MCQ: 10 questions on basic CS concepts and aptitude.
  - Programming: 2 questions
- Group Discussion: groups of 5 were made and we were asked to discuss data privacy in social media.
- Technical Interview: Asked about my previous experiences, gave one standard coding problem (four keys are given and found the maximum number of A's which can be printed) and asked about some basic DSA concepts.
- Managerial Interview: Nothing technical in this round

Sources of Preparation
Solving GeeksforGeeks/Leetcode might help to crack the coding round and technical interview rounds. Good communication skills might also be required to perform well in GD/HR rounds.

Courses and Certification
Data Structures and Algorithms, OOP.

Other Relevant Information
Research about the company before your interview rounds. You may be expected to know about the company and what it does.

Sector: IT/FinTech

Name: *Shahid Nazir (2020H1030120P)*
Company: Q2eBanking Solutions
Profile: Associate Software Engineer

Recruitment Procedure
- Written Test, Group Discussion, Technical Interview, HR Interview
- **Written Test**
  - The written test has some MCQs regarding O.S., DBMS, Networks, and general Aptitude.
  - There were also two coding questions.
- **Group Discussion**
  - The given topic was "How safe is our data from Aadhar to Facebook"?
- **Interview Round 1:**
  - Reverse a string?
  - Implement a stack using two Queues?
  - Sort an array using merge Sort?
- **Interview Round 2:**
  - Questions about my projects from my resume.
  - Questions from my resume about my skills which I had mentioned.
  - Basic Java Language questions.
  - Technical Questions from Operating Systems and Databases.
- **Interview Round 3:(HR round)**
  - What are your Strengths and weaknesses?
  - Why would you work in a FinTech company?
  - Any plans for higher studies?
  - Why Q2 company?

Sources of Preparation
- GeeksforGeeks
- InterviewBit
- Leetcode

Other Relevant Information

Be honest and calm during the interview. Ask the Interviewer questions regarding the role you have applied for and what kind of work or projects would you be doing in that company.

Sector: IT/FinTech

Name: *Sandeep Joshua Daniel (2020H1030135P)*
Company: Q2ebanking
Profile: Associate Software Engineer

Recruitment Procedure
- Online Test, Technical Interview, Managerial Interview, HR Interview.
- The online test consisted of some MCQs and 2 Coding Tests.
- There was no negative marking
- More weightage is given to the coding questions so its important not to spend too much time on the mcq.
- Of the coding questions one was easy and the other was hard.
- The technical interview was based on oops concepts and data structures and algorithms.
- The Managerial Interview was an informal discussion about my projects and interests.
- The HR interview was about my strengths, weaknesses, etc.

Sources of Preparation
I practiced some coding questions from Leetcode. But the majority of preparation was from my previous interviews and tests where I was rejected. Simply working on the problems you couldn't solve will improve your chances for the next company. On some occasions I had the Interviewer ask the same question that was in a previous coding test.

Courses and Certification
OOPS was a major focus this was followed by knowledge on Data Structures and Algorithms

Other Relevant Information

It's alright to say you dont know an answer or aren't sure about the answer. It's better not to waste too much time on something you don't know. Often then the interviewer may ask an easier question in that field to test if you have knowledge in that field if you aren't able to answer a difficult question. It's also important to think out loud so the interviewer is aware of your thinking and can provide hints if necessary.

Sector: IT

Name: *Aditya Rangnath Rokade (2020H1030128P)*
Company: Radisys
Profile: Software Engineer

Recruitment Procedure

- **Written Test:** Written test consisted of MCQs based on Aptitude (logical and reasoning), OS, CN & DBMS (gate level), CPP and Java output. Time was a constraint here, with more MCQs in less time.
- **Technical interview Round-1:**
  - Tell me about yourself. All projects' introduction. Then any one project explained in detail.
  - Asked two coding questions (easy)with optimization. Total code has to be written of given questions.
  - Asked some OOPS concepts. Then moved to theoretical subjects. Asked threads, process, deadlock and process lifecycle from OS.
  - The duration of the interview was 45-50 min.
- **Technical interview Round-2:**
  - Five students were shortlisted for this round. Started with an introduction, then detailed discussion about projects. All projects' details were asked.
  - Then he gave me one puzzle. That was an easy puzzle; I was able to solve it within 5 minutes.
  - Then I asked about the Company's ongoing project. He explained everything to me.
  - The duration of the interview was 35-40 min.
- **HR:**
  - Three students were shortlisted for HR.
  - Tell me about yourself.
  - Why Radisys?
  - Discussion about family background, academic performance. Some HR questions.
  - The duration of the interview was 10-15 min.

Sources of Preparation
- GeeksForGeeks must do questions
- HackerRank
- Gate level knowledge of OS, CN, DBMS.

Other Relevant Information
- Choose any platform for coding practice, Start preparing as early as possible.
- Do some projects. Get detailed knowledge about your projects.
- Revise OS, CN and DBMS. Be strong in the OOPs concept.
- In the interview, always ask questions about the company. Always once go through the company's website. All the best for placement.

Sector: IT

Name: *Kaushal Rajan Hatwar (2020H1030122P)*
Company: Sandvine
Profile: Software Engineer

Recruitment Procedure

- Pre Placement Talk
- Online Test – 3 Sections with sectional cutoff. Test was easy. However, it is important to maintain speed to finish all the questions.
  - Aptitude MCQ – 15 Q in 20 min
  - Technical MCQ – 25Q in 40 min
  - Technical Subjective Coding – 3 Q in 45 min. No IDE or Test Cases. Just a textbox to write your code.
- Round 1- Technical:Concepts of OS, CN were asked. Project mentioned in the resume was discussed in depth. Lasted for about 1 hour
- Round 2 – Technical + Managerial + HR: Again, OS and CN were discussed. Was asked to explain the code written in the Online Test too. Questions like why should we hire you , tell us about yourself etc were asked. Main focus was on the basic concepts and not coding.

Sources of Preparation

- Coding – GeeksforGeeks, Pepcoding , InterviewBit
- Technical – Gate syllabus revision is enough

Other Relevant Information

In your resume only mention those things, which you know and can explain to the interviewers, specifically when it comes to projects. Find out what the company does and try answering the HR based questions around those points so that they find your company relative.

Sector: IT

Name: *Saurabh Divekar (2020H1120275P)*
Company: Sandvine
Profile: Software Engineer

Recruitment Procedure
- CGPA Cutoff 7.5
- Online Test on HirePro platform:
  - Test has 3 sections (Moderate Difficulty):
    - Aptitude : 15 Q/20 min
    - Subject Concepts : 25Q/45 min
    - Pseudo Code : 3 Q/45 min
- Technical Round 1:
  - Work ex summary (I had 2 years of work experience) roles and responsibilities.
  - Project discussion.
  - Structure and C/C++ concepts.
  - Implementation of queue with two stack codes (including driver code on notepad).
  - Print Reverse of LL without reversing it (including driver code on notepad).
  - OOPS concepts, Debugging code which has classes and have to detect and resolve a memory leak bug in code.
  - OS and Networks standard questions.
- Technical Round 2: (Panel of 4 - 1 Director, 2 TL and 1 Manager asking questions one by one)
  - Projects and work ex summary.
  - OS concepts such as virtual memory, Virtual Machines,, Virtual memory implementation without using secondary memory.
  - CN concepts DNS, detailed process of visiting a site, shadow server,load balancing.
  - Few standard puzzles.
  - OOPs concepts and tested in depth implementation on real world scenarios.
  - Kernel level process and user level Process with actual explanation of a scenario
  - Implement a LL without using pointers.
  - Design a chat bot system for deaf, blind, mute people; its implementation and language design.

○ SQL vs NOSQL and uses and scenario based questions on their application.

Sources of Preparation

- Love Babbar 450 sheet, Leetcode and gfg must do.
- GATE Note of OS,CN,DB.
- Youtube videos for OOPS concepts and OOAD subject(offered in Sem 1) notes.

Courses and Certification

- Stanford University – Machine Learning.
- NPTEL Certifications – Reinforcement Learning, Data Science, AI: Constraint Satisfaction.

Other Relevant Information

- Extra Curriculars/ Co-Curriculars Mentioned:
  ○ General Secretary of College (Undergraduate College).
  ○ Institutional head (Undergraduate College).
  ○ 2 National / 1 District / 16 Inter-College awards in Drama.
- Practice DSA as much as you can and make a habit of writing codes with driver code on notepad.
- Make thorough understanding of OOPS concepts and implement a project extensively using these concepts.
- Have at least GATE level understanding of CN, OS, DB and practical knowledge of all working concepts.
- Do some mock interviews and improve communication skills.
- Don't Fake the resume and be 100% sure on what you have written.

Sector: IT

Name: *Yash Chandak (2020H1030141P)*
Company: Sandvine
Profile: Software Engineer

Recruitment Procedure
- Pre Placement Talk
- Online Test – 3 Sections with sectional cutoff. Test was easy. However, it is important to maintain speed to finish all the questions.
  - Aptitude MCQ – 15 Q in 20 min
  - Technical MCQ – 25Q in 40 min
  - Technical Subjective Coding – 3 Q in 45 min. No IDE or Test Cases. Just a textbox to write your code.
- Round 1- Technical: Concepts of OOPS , CN were asked. Project mentioned in the resume was discussed in depth. One code was asked to demonstrate Virtual Functions. Lasted for about 1 hour
- Round 2 – Technical + Managerial + HR(sort of): Again, CN were discussed and some puzzles were asked. Main focus was on the core concepts and not coding.

Sources of Preparation
- Coding – GeeksforGeeks, LeetCode
- Technical – Gate syllabus revision is enough

Other Relevant Information
In your resume only mention those things, which you know and can explain to the interviewers, specifically when it comes to projects. Find out what the company does and try answering the HR based questions around those points so that they find your company relative.

Sector: IT/Analytics

Name: *Shekhar Sharma (2018ABPS0250P)*
Company: Searce Inc.
Profile: Business Process Analyst.

Recruitment Procedure

- Aptitude test, 2 technical interviews, HR interview.
- Test had 3 sections:
  - Verbal- based on a short passage, the only type of question was to identify if the given statement can be inferred from the passage or not.
  - Data Interpretation
  - Quant
- Test was easy. However, it is important to maintain speed to finish all questions.
- First interview is more of an interest capture interview as in which role you are interested in as it comes for 3 different roles. Some logical/puzzle questions were also asked in this round.
- The second interview focused totally on your resume, so be thorough with your projects.It is more about knowing the skills that you have put in your resume.
- The HR interview was lite , he asked questions like tell me about your family background,what gives you joy,what is your highest achievement in life. These are general questions, so be prepared for it.

Sources of Preparation

No special preparation is required for this role; it is more of aptitude dependent so prepare that in advance. Other than that they are interested in people who have done projects in IT so try to do some projects in IT, like I have done front-end web development and android-app development.

Other Relevant Information

Try to be analytical and objective in the interviews. You should be able to show your willingness to learn and work in the organization in the HR and resume round. Customizing the resume according to the job profile and highlighting important points would help a lot.

Sector: IT

Name: *Avinash Dasigi (2020H1030123P)*
Company: SecureWorks
Profile: Software Engineer 2

Recruitment Procedure

- CGPA Cutoff 6.0
- Online Test on HirePro Platform (60Q in 2 hours) -
    - Test had 2 sections (Moderate Difficulty)
        - Aptitude: 15 Q
        - Subject Concepts: 45Q (DSA, OS, CN,CO,DBMS)
- Technical Round 1:
    - Work ex summary (I had 3 years of work experience as Frontend Engineer).
    - Project discussion.
    - One coding question on the addition of binary Strings.
    - Questions on padding bits and overflow.
    - Questions on Cloud computing and container scheduling.
    - Questions on frontend frameworks and Restful services.
    - OSI model and TCP/IP stack.
- Technical Round 2:
    - Find the middle of the linked list.
    - Stack implementation
    - Questions on JavaScript and Restful Services.
    - Hourglass puzzle
    - Rotation of a 2D array by 90 degrees.
    - Questions on Candidate key, foreign key and joins.
- Techno-Managerial Round 3 (With Engineering Manager):
    - Friendly talk to ease up the nerves.
    - Asked questions related to work experience
    - Where do you see yourself at SecureWorks?
    - What do you know about the company?
    - Questions on transactions in DBMS, rollback,
    - Questions on TLS/SSL security.
    - Question based on cross product in SQL query.
    - What happens in the Application layer of TCP/IP?
    - How data is broken into frames and transmitted over routers?

- ○ Question on Java interfaces.
- ○ Gave a brief review about the kind of work and tech stack required.

Sources of Preparation
- HackerRank - For beginners
- LeetCode, GFG for interview prep
- GATE Notes of OS, CN, CO, DBMS.
- OOPS Concepts

Courses and Certification
Algorithms 1 and Algorithms 2 by Robert Sedgewick from Princeton University

Other Relevant Information
I would suggest doing as many problems as possible rather than preparing for a specific company. A proper dedicated 3 months of consistent coding is a must.

Sector: IT

Name: *Gauransh Sawhney (2018A3PS0325P)*
Company: ServiceNow
Profile: Associate Software Engineer

Recruitment Procedure

- CGPA cutoff - 7
- PPT > Online Test > 2 Technical Rounds > Hiring Manager Round
- Online Test:
  - 1 coding question
  - 15 MCQs based on basic concepts of DSA, OOP, OS and DBMS
- Technical Round 1 (60 min):
  - The round started with some normal grilling on internships and projects.
  - This was followed by some basic questions on OOP principles.
  - I was asked two coding questions:
    - Given a binary tree, calculate the sum of all left leaf nodes
    - Given a stack, return a stack which has elements in reversed order using no other data structure.(The solution was to be optimized further by adding constraints on extra space to be used).
- Technical Round 2 (45 min):
  - The round started with some normal resume grilling. Since I had mentioned some ML projects on my resume, the interviewer asked me to give an overview of how one would implement a chatbot.
  - Two coding questions were asked:
    - Given an array containing only three types of elements: 'b', 'g' and 'r'. Return the array such that all 'b' come before 'g' and all 'g' come before 'r'. No sorting algorithm was to be used and the manipulation was to be done in-place. (Similar to this question)
    - Given row and column, return a matrix such that it has numbers from 1 to row*column and numbers are arranged column wise in ascending order for odd columns and in descending order for even columns.
- Hiring Manager Round (45 min):
  - The round started with some HR type questions and questions related to resume.
  - This was followed by two coding questions:
    - Implement a function which takes an input n to print all

combinations when n dices are thrown together.
- Write a function which takes an input n and outputs in the following way:
  - If n=0: 0
  - If n=1: 00, 01, 02, …, 09
  - If n=2: 000, 001, …, 010, …, 099

Sources of Preparation

Leetcode, InterviewBit, GeeksForGeeks, Course slides for OS and OOP. Abdul Bari on YouTube for DSA.

Courses and Certification

DSA, OOP, OS, NNFL, ML

Other Relevant Information

- Be confident, think out loud during your interviews. Generally, the interviewers are helpful and are willing to provide you with hints or guide you in case you are stuck.
- Your approach matters more than the final solution hence it is important to communicate your thought process to the interviewer.
- Interviewers generally take questions at the end of each round. Use this as an opportunity to engage with the interviewer and show your interest in the company.
- Be thorough with your resume and be prepared for possible cross-questions. Make sure you have a basic idea of the technologies and domains involved in the projects mentioned in your resume.
- As part of last-minute preparations, go through the past interview experiences of the particular company on GeeksforGeeks. You can get a general sense of the pattern of interviews of that particular company.

Sector: IT

Name: *Kshitij Gupta (2017B3A70601P)*
Company: ServiceNow
Profile: SDE

Recruitment Procedure
- Coding Test: 60 min coding test which consists of 1 medium level Leetcode coding question. Around 15 MCQ related to CS fundamentals, OOP,OS ,DBS,CN.
- Technical round 1:
  - Round started with my Introduction, followed by discussion of one project of my choice. Then I was given 1 question to solve.
  - https://leetcode.com/problems/maximum-number-of-events-that-can-be-attended/.
  - I had to write code in codepair. The code ran successfully in the first attempt and the interviewer was quite happy. My round finished in 30 minutes. Other students' interviews lasted for 1 hour.
- Technical round 2: There was no coding question in this round, Almost every important topic from OOP, DBS, OS was asked. Few questions were:
  - Write Procedure, triggers in SQL
  - Inner join and outer join
  - Difference between drop, delete, and truncate
  - What is data hiding and binding?
  - Stream in C++
  - C++ vs Java
  - DDl and DML
  - Polymorphism
  - Overriding vs overloading
  - Virtual memory
- Hiring Manager round 3: My internship project was asked in detail following a few HR questions.

Sources of Preparation
- For DSA: Leetcode and Interviewbit.
- For DBS, OS,OOP,CN: lecture slides and class notes + GFG

Sector: IT

Name: *Satyam Singh (2018A7PS0178P)*
Company: ServiceNow
Profile: Associate Software Engineer

Recruitment Procedure

- Screening test – 1 hour – 1 coding question (calculate the number of sentences that can be formed out of the given sentence by replacing words with their anagrams from a given list of words) and 15 MCQs on programming language fundamentals, OS, DBMS, OOP, Graph theory etc. were asked.
- Round 1 Technical Interview –
  - Basics of Stacks and Queues were asked with scenarios where they can be used (like balancing parentheses and processes scheduling by OS).
  - Theoretical questions on what is JDK, JRE and JVM and how the garbage collector of JAVA works. Questions on access modifiers in java with different scenarios were asked.
  - Aptitude puzzles were given (like complete the series 0,1,2,5,20,25, _ , _).
  - A brief discussion on what projects I did and how those projects can benefit my work at ServiceNow.
- Round 2 Technical Interview –
  - This was a lengthy Interview which started with discussion on my projects. I was asked to design a Spotify like app which learns the music preference of the user (via history) and updates the order in which songs are displayed on homepage (I was asked to give an approach without ML, only usage of DSA was allowed) I gave a priority queue (max heap) based approach. The interviewer was more focused on which data structure I use and how well I optimize the space and time complexity of updatePreferance function.
  - Then some Dijkstra based graph questions were asked and one easy question on strings was asked
  - following this 4-5 simple SQL queries and questions on Joins (types and use cases) were asked.
- Round 3 Hiring Manager (HM) Round –
  - The interview started with a few questions on ServiceNow, what it does and what I see myself working on in coming years.
  - Then a few questions about past projects and internships were asked and he expected me to give full details of what and how I did. He also asked me to think of some improvements in the approach I took back then.

- ○ After this he asked me to design a cloud-based server with a bottleneck of 50 users and a possibility that once a year, at once 500,000 users might try to log in. He wanted to know how I would reduce the waiting time of the users and how I would manage the queue of users. What type of UI adjustments I would do to ensure that users have an engaging waiting time (and not server is busy error message).
- ○ Since this was something new for me, after listening to my naïve approaches he gave me hints to use caching and multi-threading to improve my approach.
- ○ After this he asked me to write the code for quick sort and asked questions about the effects of choosing different pivot indexes on swap operations.

Sources of Preparation
- Leetcode – you should be able to solve medium and easy level questions of Leetcode with ease. Okay if you're not able to solve hard ones in one go.
- Geeksforgeeks – Solve the company's archives and go through past interview experiences.
- Practice MCQs on OOP, DBMS and OS too.
- DBMS lecture slides (specially pre-midsem) and labs (1-6)

Courses and Certification
- DSA and OOP are of utmost importance. I highly recommend revising DBMS, especially SQL.
- Operating Systems and Computer networks are not must but better if you revise the basics (specially Semaphores in OS).

Other Relevant Information
- Never panic, just stay calm during the interview.
- Before mastering algorithms with fancy names, make sure you master the basic and fundamental ones like sorting (quick, heap, merge), Trees (traversals) and graphs (DFS, BFS, Dijkstra etc).
- Interviews always start with basic questions and if you answer those and are unable to answer hard one's chances of going to the next round are still good. But if you are unable to answer basics then they might reject you without even asking the hard questions.

- Do not pause for 10+ seconds thinking about the "best" approach, just say the one in your mind and ask for hints or improvise afterwards. Always stay confident, and remember, you want to be hired and they want to hire you! :)

Sector: IT

Name: *Siva Sai (2017B3A70779P)*
Company: ServiceNow
Profile: Associate Software Engineer

Recruitment Procedure
- Online test :
  - The test had one coding question(medium-level question based on hash maps), 12 MCQs based on DSA, DBS, and OS.
  - Coding question link
- Technical interview-1:
  - Duration – 60 mins
  - Platform- Hackerrank Codepair.
  - The interviewer was a senior software engineer.
  - Two DSA questions(medium level) were asked. We are supposed to discuss the approach with the interviewer and then code the solution. Questions on time & space complexity followed each question and if we can make any further improvement.
  - Question-1 : https://leetcode.com/problems/binary-tree-pruning/
  - Question-2 : https://leetcode.com/accounts/login/?next=/problems/longest-substring-with-at-most-k-distinct-characters/
  - The interviewer asked if I had any questions for him.
- Technical interview-2:
  - Duration – 70 mins
  - Platform- Hackerrank Codepair.
  - The interviewer was a senior software architect.
  - Three DSA questions (one medium, two hard) were asked. We are supposed to discuss the approach with the interviewer and then code the solution. Questions on time & space complexity followed each question. The interviewer started by asking how good I am with dynamic programming.
  - Question-1: What are the differences between Java and Python?
  - Question-2 : https://leetcode.com/problems/longest-palindromic-substring/
  - Question-3: https://leetcode.com/problems/wildcard-matching/
  - Question-4: https://leetcode.com/problems/merge-k-sorted-lists/
  - The interviewer asked if I had any questions for him.

- Hiring manager round:
  - The interviewer was a manager leading a core team in the company.
  - The interviewer started with my introduction and went on to other questions like:
    - Family background?
    - Why did you choose computer science?
    - Any plans for doing MS?
  - After this, he asked a few technical questions from DSA & OS. We are supposed to write code for all the questions.
    - How to find a cycle in a linked list? He was expecting the Hare-tortoise algorithm.
    - How do you find duplicates in an array of strings? Although the question was easy, he went deep into comparators for custom sorting.
    - Write code to create five processes(using *fork()*) and schedule them using a round robin algorithm. I was supposed to incorporate the functionality to kill the processes also.
  - The interviewer asked if I had any questions for him

Sources of Preparation
InterviewBit, Leetcode, GFG archives, Course slides of DSA, DBS, OS, and CN.

Sector: IT

Name: *Sparsh Aggarwal*
Company: ServiceNow
Profile: Associate Software Engineer

Recruitment Procedure

- Online Test, 2 Technical Interviews and 1 Hiring Manager Round
- Online Test:
  - 1 Coding question: Calculate how many sentences can be formed if the words in a given sentence can be replaced by an element given in a words array and the element with which we are replacing should have the same number of characters.
    Input:- { abs,hel)
    Sentence:- sab bas leh
    So Output 8 (First word and second word can be replaced with abs and third with hel).
  - 14-15 MCQ on OOP, OS, DBMS
- 1st Technical Round :- 2 Coding Questions and 2 Course Related Questions.
  - Find longest increasing path in a n*n matrix(movement 4-directionally). Then was asked to print the path also
    [1 2 3
     4 10 11
     9 34 23]
    Longest increasing sequence => 2 10 11 23 34
  - Second question was to count the valid Parenthesis pair in a given String
  - And two conceptual questions on OS LiveLock and Semaphore.
- 2nd Technical Interview:- Project Related Question + 1 Coding Question
  - An array was given in which we have to print the array in a zigzag manner. Like the second element is greater than first and third is smaller than second and again fourth is greater than three. I solved it using Sorting but was asked to implement using Dynamic Programming also.
    https://www.geeksforgeeks.org/convert-array-into-zig-zag-fashion/
  - One conceptual question: Difference between greedy and dynamic programming and when to apply greedy and dp.
  - There were some HR related questions also like why the Software Industry? And why not EEE.

- 3rd Hiring Manager Interview:
  - It was a managerial round where the interviewer asked HR+Technical questions.
  - For HR he asked my interests, my family background , why the software industry, what happens in software companies and many more similar questions.
  - And, For the coding question, He asked me to do the thread Scheduling in the round robin manner. He gave me two functions: to implement a call function to start a thread and kill function to start thread. Was asked to write pseudocode. At last, he said he was not expecting much but wanted to just check my OOP and OS concept.

Sources of Preparation

- LeetCode, InterviewBit and Gfg for Problem Solving . Codebix Youtube Channel for Leetcode Solutions if one gets stucked.
- Youtube Channels: Aditya Verma, Tushar Roy and Take U Forward
- For Courses I followed Gate Smashers and Bits Courses Slides.

Courses and Certification

Data Structures and Algorithms, OOP and Operating System

Other Relevant Information

- Be very sure of the time and space complexity of your algorithm.
- Just Express Your Ideas and Approach to the Interviewer and try to catch every Hint the interviewer is giving.
- Always try to ask questions to the interviewer at the last to show your interest towards the company.

Sector: IT

Name: *Abhinav Anand (2020H1030130P)*
Company: Sigmoid Analytics
Profile: Associate Software Developer Engineer

Recruitment Procedure
- Online Test:- 20 MCQ from Core C.S
- Technical Interview**:** Tell about Yourself. Print Matrix in Spiral form.
- Technical Interview 2: Coding Questions on Remove Duplicates from String and Number of Islands .
- HR Interview: Asked about Projects and other Hobbies.

Sources Of Preparation
- GeeksForGeeks
- Leetcode Interview Questions

Sector: IT

Name: *Pratyush (2020H1030121P)*
Company: SS Supply Chain Solutions
Profile: Data Scientist

Recruitment Procedure
- Resume shortlisting, Written test,Technical interview 1, Technical interview 2
- Test had 23 questions (not 100 percent sure) based on ML,Python,Aptitude
- Test was not very difficult , aptitude questions were easy , ML questions were moderate, python questions were based mainly on lists and dictionaries.
- Interview R1 questions :
  - Tell me about yourself
  - Questions from the project
  - Given a real world scenario and asked to make an ML model for it.
  - Secondly he gave a scenario where some data was missing and asked me how to deal with it.
  - Questions related to normal distribution , skewness, kurtosis
  - Questions related to outliers
- Interview R2 Questions;
  - Tell me about yourself.
  - Project discussion for about 25 min.
  - Some basic questions related to stats.
  - Some basic HR questions.

Sources of Preparation
Coursera, Udemy

Courses and Certification
Deep learning specialization Coursera

Sector: IT

Name: *Swapnil Akash (2020H1030133P)*
Company: SS Supply Chain Solutions
Profile: Software Developer

Recruitment Procedure
- Resume Shortlisting: Front-end skills will be a plus.
- Online Test: 12 MCQ, 2 Coding, 1 SQL
- MCQs:
  - Mathematical Puzzles
  - Quant
  - Output based C++/Java questions
  - SQL query based output questions
- Coding:
  - Questions based on Dynamic Programming and strings. (Level : Medium)
  - SQL : Query based on Join operation and Group By clause. (Level : Medium)
- Technical Interview:
  - Introduction
  - Given a string of alphabets and special characters, reverse the string without changing the position of special characters.
  - Overview of my projects.
  - Brief overview of API, Microservices, Cloud. (Not in-depth)
- Managerial Interview:
  - Career Goals
  - Discussion on the company's service offerings and use cases.
  - Give use cases of self-join and left outer-join in SQL.
  - Why would the company need to move to the cloud?

Sources of Preparation
- GeeksForGeeks
- Leetcode
- GATE notes of Database, OS, Data Structures and Algorithms.
- Read about the cloud through any provider like Azure, AWS, etc. I had an understanding of Microsoft Azure which really helped me during the interview.

Courses and Certification

I hadn't mentioned any certifications or courses. Be prepared for any resume based questions.

Other Relevant Information

Do study about the company like their goals, skills, and service offerings. Be aware about the recent tech used in industries.

Sector: IT

Name: *Dhruv Agarwal (2018A7PS0263P)*
Company: Standard Chartered
Profile: Software Engineer/Techno Banker

Recruitment Procedure
- Situation based behavioral test: This was an untimed test. Answer questions based on a video.
- Coding Round: 2 questions in 90 minutes. The questions were mainly based on arrays and hash maps.
- Technical Interview:
  - Coding questions were asked and the interviewer was mainly looking for the approach (No actual typing was required).
  - There was a question on compound interest: Invest 1000 rupees everyday with an r.o.i. of 5% and find the total sum after 10 years. Again, he asked for the approach, not the final answer.
- Manager Round: This round focused on projects and HR questions. Know your project very well and prepare answers for challenges faced during the project and how you overcame them.
- HR Round: This was a 10 minutes discussion where she asked about my family background and if you are interested in joining start-ups/going for higher studies.

Sources of Preparation
Interviewbit is the best source for learning data structures in a structured way. After each section try solving problems on leetcode related to that topic.

Courses and Certification
Data structures is a plus but mainly enough coding experience for clearing the coding test is required.

Sector: IT

Name: *Shivam Goyal (2018A7PS0167P)*
Company: Standard Chartered
Profile: Software Engineer/Techno Banker

Recruitment Procedure

- Psychometric Test - There were 14 questions depicting a situation in the daily work of an employee at the bank. Given 4 options on how to handle the situation, I had to choose which ones are more or less preferable.
- Online Coding Test - Two competitive coding questions
    - Image Matching - Given two grids of 0's and 1's, representing two images, find out the number of connected regions of 1's in the two images that overlay over each other completely. If one of the connected regions is larger than the other, then it cannot be considered in the match.
    - Can you Make a Palindrome - Given a string s and a series of queries (specifying a beginning & ending index and no. of substitutions), determine if it is possible to rearrange the string to a palindrome after performing a maximum of the given number of substitutions.
- Interviews
    - 1st round - Discussion on resume & a machine learning research paper (which was part of one of my projects), had a discussion about my PS 1 project also. No DSA questions were asked.
    - 2nd round - Talked about considerations while opting for the Computer Science branch at BITS and talked about my journey uptil now.
    - 3rd round (HR interview) - Asked me about my journey uptil now, about my family background and if I had plans for higher studies or not.

Sources of Preparation

- GFG company specific archives (some questions from previous online tests repeated in our tests)
- Errichto dynamic programming lectures on YouTube
- Techdose YouTube channel and Leetcode Top Interview Questions

Other Relevant Information

- In some interviews or online tests, it may be possible that we are asked to write code in a simple text editor or Google doc, instead of a VS code interface
- When sitting for an interview, you need to pace yourself so that you wind up everything within the allotted time, 5 mins above is fine, but not more than that
- When the interviewer puts up a question, ask for some additional details related to the question, the constraints on the values of variables (helps to understand the time complexity required), then think out loud, and discuss the approach to be taken. Once the approach is discussed write the code for your solution in 5-10 mins
- Since we all are undergrads, the interviewer doesn't look for demonstrated success, but for a potential to write code. If you have fancy projects, it definitely helps, but you need to be familiar with core CS fundamentals.
- Keep code simple (don't try to merge 2 or 3 statements into one, which makes it look fancy and complicated) & readable, keep meaningful variable names, speak in language that the interviewer understands instead of a fancy language, discuss trade offs
- Keep a simple resume, the interviewer doesn't look for fancy things. You may get knocked off if he digs deep.
- It is good to have a few sets of questions you would want to genuinely ask, you would enjoy asking at the end of the interview.

Sector: IT

Name: *Vikram Singh Chundawat (2018A2PS0128P)*
Company: Standard Chartered
Profile: Software Engineer/Techno Banker

Recruitment Procedure

- Psychometric Test, Coding Test, Coding test, Technical Rounds, HR
- Psychometric test:Several scenarios were given and we had to give the preference of available options for that particular scenario.
- The Coding Test had two coding questions. Both of them were of medium level difficulty.
- There were two technical rounds, both of them lasting 20-30 mins. Projects and experience were discussed in both of them.
- The HR round was 15 mins. Basic HR questions and preferences were asked.
- Questions:
  - Describe yourself?
  - Where do you see yourself in 5 years?
  - Common questions on projects.

Sources of Preparation

Geeksforgeeks, Leetcode, PU preparation portal.

Courses and Certification

No specific course questions were asked, everything was revolving around past projects and interests.

Other Relevant Information

One should have a strong group over his/her resume. Anything can be picked and asked from your resume

Sector: IT

Name: *Kaival Parikh (2018A7PS0176P)*
Company: Tekion
Profile: Software Engineer

Recruitment Procedure
- Resume Shortlisting (CS Branch)
- Online Test – MCQs related to DSA, OOPs, DBMS, OS and 2 Coding Questions (Medium Level)
- Technical Interview 1 – A bit about projects, DSA – Coding (Graphs, Trees, Linked Lists, etc), DBMS (Normalization, Indexing) and OS (Scheduling, Deadlocks), Networking Concepts
- Technical Interview 2 – DSA – Coding, More on OOPs, DBMS, OS Concepts (Similar to Round 1)
- HR round – Asked about overall experience. Given some situations, asked about my approach towards them. Asked me to explain some technologies (like Blockchain since I had worked on it recently) to a layman. Explained a bit about the company culture

Sources of Preparation
GeeksForGeeks Archives, Leetcode

Other Relevant Information
DSA is really important, also read up on OOPs, DBMS, OS interview questions

Sector: IT

Name: *Kalash Shah (2018A7PS0213P)*
Company: Tekion
Profile: Associate Software Engineer

Recruitment Procedure
- The first round was the Pre-Placement talk given by the company. You get to know a lot about the company, and this is something that sets the first impression of the company in your mind.
- After that you have the Resume Shortlisting Round where the company would select the students who would be appearing for the Coding Test.
- Coding Test:
  - Was taken on Hackerearth platform.
  - The test consisted of 20 Questions. 18 Multiple Choice Questions and 2 Coding Questions. The Coding Questions were comparatively easier than other companies and consisted of 70 marks.
  - The MCQs had different scores ranging from 1 – 6 and were mainly on concepts of OOP and DSA. There were many questions asked on the Multithreading concept, Stacks, Queues and some on Aptitude.
- Round 1 of Interview:
  - The round lasted 45 minutes. It started with basic Problem-Solving Questions, you can find most of them on Geeksforgeeks and Leetcode.
  - For example, finding the number that doesn't have a duplicate and some of the questions were on binary trees (Finding the LCA). You need to code everything and test it on a Local IDE.
- Round 2 of Interview:
  - The round lasted 60 minutes. It started with Problem-Solving Questions, you can find them on Geeksforgeeks and Leetcode.
  - For example, finding the left and right view of a Binary Tree (Hint: Use BFS). Implement 2 Stacks using a Fixed size array the stacks can have different sizes.
  - Theoretical part: Addition and Deletion of a Node from a Balanced BST and its complexity (was asked to show it on different examples on blackboard).
- HR Round:
  - The round lasted 30 minutes. It consists of analytical, reasoning and thought based questions.

- They were more like situation-based questions, for example what you would do being the CEO of a start-up company doing XYZ, so that people would get to know about your product/services.
- He asked me about the feedback of interviewers and a brief description about Interviews too.
- In some questions about teamwork and communication and volunteering and multitasking, try to give relevant examples of your campus experiences that you find valid to that situation. This would help him/her to analyze you better and would decrease the chances of rejection.

Sources of Preparation

Read all the theories and important concepts before going to an interview. You can be asked literally anything and it's not good for an interviewer to find you not knowing something. It can highly decrease the chances of selection into your next round. Other than that, you can keep reading GFG articles and practice solving Leetcode/Binary Search.

Other Relevant Information

- It is important to ask questions related to technology and company and obviously about his/her role in the company.
- It is not expected of you to say that I don't know this subject, or I am weak in this/that. Just try to forget everything and try to remember in the following steps: Which subject is it related to? Have you come across it previously? If you don't remember the definition, try making him understand using examples of code.

Sector: IT

Name: *Rahil N Jain (2017B4A70541P)*
Company: Tekion
Profile: Associate Software Engineer

Recruitment Procedure
- Online coding test:
    - Coding 1: Simple array with math problem.
    https://www.hackerearth.com/practice/basic-programming/implementation/basics-of-implementation/practice-problems/algorithm/find-size-of-board-126689c0/
    - Coding 2: Just a very long implementation in one while loop.
    - MCQs : Question where based on DSA, OOP, DBMS, OS.
- Interview Round 1: Started off by asking about the company and my passion to work there. Then a simple tree coding question. Later they asked for 3 favourite subjects of mine and asked very deep questions on them.
- Interview Round 2:
    - Started with "Tell me something which is not in your resume".
    - Later some more deep questions on projects.
    - Then solved 2 questions, one with a maze with dp (very common). Two, some basic questions on heap complexity analysis and general discussion on questions related to heap.
- Interview Round 3: HR round.
    - Pick a project which you worked on intensively. What are the problems you faced? As a team member what was your contribution to it?
    - Why Tekion?
    - Which role are you most suited to?

Sources of Preparation
- Interview Bit. https://www.interviewbit.com/courses/programming/
- If you are new to any of the concepts.
https://www.hackerearth.com/practice/algorithms/
- Top interview question Easy and Medium from leetcode, as interview questions repeat MANY times.
https://leetcode.com/explore/featured/card/top-interview-questions-easy

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Courses and Certification

Data Structures and Algorithms is a must! Then Object Oriented Programming, Database Systems, Operating system questions are asked if you have done these courses.

Other Relevant Information

Only CS students were allowed this time. Do read about the company beforehand. They check if you are passionate about working in a start-up.

Sector: IT

Name: *Siddharth Jain (2017B3A70551P)*
Company: Tekion
Profile: Associate Software Engineer

Recruitment Procedure

- Coding Round had 2 coding questions, one of them was -
  https://www.hackerearth.com/practice/basic-programming/implementation/
  basics-of-implementation/practice-problems/algorithm/find-size-of-board-1
  26689c0/
- Technical Interview 1: The interview lasted for 2 hrs. It was totally DSA based and
  the interviewer asked 4 coding questions -
  - Write a function to get the intersection point of two Linked Lists.
  - Next Greater Element.
  - Partition a Array into K subsets with equal sum.
  - Given a m*n grid of 0's, 1's and 2's with 1's being viruses and 2's being
    immune. All viruses (1's) can infect only their adjacent 0's in 1 sec and on
    being infected a '0' changes to '1'. If all viruses start infecting at t = 0 and
    (0,0) position will always have a '1', then find the minimum time needed to
    infect all 0's. I was able to solve the first 3 problems.
- Technical Interview 2: The interview was mainly focused on checking OOP, OS,
  DBMS knowledge.
  - DSA: 1 coding question: Equal Tree Partition.
  - Geeks for Geeks OS last-minute notes, JAVA MCQs, and interviewbit Top
    Dbms interview questions were sufficient to answer all questions.
  - Discussion on projects.
- HR Round: It was a 15-20 min interaction with the interviewer. Basic HR Round
  questions were asked along with a little bit of discussion on projects.

Sources of Preparation

- InterviewBit and Leetcode for programming.
- GeeksforGeeks for OOP, OS, DBMS, CN.

Courses and Certifications

DSA, DBMS, OOP, OS, CN.

Other Relevant Information

The majority of the questions are variations of the standard ones. Therefore, learning and Repeatedly practicing the standard questions of each topic is extremely important. Following this, it is crucial to try and connect any new questions to what you've already learned.

Sector: IT

Name: *Dipradeb Saha (2020H1120291P)*
Company: Teradata
Profile: Software Engineer

Recruitment Procedure

- Online Test:
    - Test was of 1 hour and had 20 MCQs, consisting of questions from OS, Computer Architecture and Organization, DBMS, Data Structures and Algorithms(DSA).
    - In 60% of the questions, we were asked to find out the output of some C or C++ code snippets.
- Technical Interview (1 hr):
    - First, I was asked to give a brief introduction. Then they checked my coding skills (only pseudocodes were asked). Questions asked:
        - Swap two nodes of a Linked List
        - Write a program to find boundary traversal of a binary tree.
        - Implement a self refreshing cache in C programming.
    - I was able to do the first two codes, but couldn't do the 3rd question. A brief discussion followed on the projects that I worked on.
- Hiring Manager Round(45 mins to 1 hr):
    - Brief introduction about myself and then asked to write a program to reverse a string.
    - Then asked basic DBMS questions – DML, DCL, DDL, what is primary key, foreign key, explain referential integrity constraint with the help of examples.
    - Detailed discussion on one of the projects mentioned in my resume.
    - What do you know about Teradata? Why do you want to join Teradata? (Be attentive in the Pre Placement talk).
- HR round (20-30 mins):
    - How are you doing? Introduce yourself, family background.
    - What are your aspirations?
    - Location Preference
    - Then the interviewer asked if I had any questions. I asked about the domain where I will work, the CTC break up, etc.

○ This round was just about casual discussions.

Sources of Preparation

- InterviewBit, GeeksForGeeks (Company archives, commonly asked interview questions for OS, DBMS, Data Structures and Algorithms, OOPs Concepts(C++/Java,preferably C++))
- Self-prepared GATE level notes for the above subjects mentioned.

Courses and Certification

- DSA, OOPs, DBMS, OS, C and CPP programming (most of the development work is in C and CPP as mentioned in the Pre Placement Talk), Python Programming.
- I had a certification in Python Programming from Coding Ninjas, but it was not of much help.

Other Relevant Information

- Be attentive in Pre Placement Talk. They will see how much you are interested in the company and how much effort you gave to know what the company does.
- Be confident. Don't be nervous. Most of the questions were very easy. In codes, they generally see the logic you are using rather than your coding skills in a particular language.
- Since Teradata develops data warehousing and database analytics software, they expect good knowledge in DBMS from the students.

Sector: IT

Name: *Shouvik Chatterjee (2020H1030119P)*
Company: Teradata
Profile: Software Engineer

Recruitment Procedure
- There were 4 rounds.
- The 1st round was an online MCQ round. Questions were asked on C/C++ Programming, Data Structures, Computer Organization.
- The 2nd round was a technical interview round. 2 coding questions were asked:
  - Swap 2 nodes in a LinkedList.
  - Print the boundary elements of a binary tree in anti-clockwise order.
  - Further questions involved thorough discussion of the projects that I had mentioned in my Resume.
- The 3rd round was a Project+Managerial round. Detailed discussion of projects was there, followed by certain behavioral/situational questions like "Tell me about a tough time you had and how you handled it", "How important is it to work in a team", "list your strengths and weaknesses", etc.
- The 4th round was the HR round. It consisted of discussion on job location preference, questions on family background, and similar other HR-type questions.

Sources of Preparation
- Practice questions from Leetcode and GeeksforGeeks, and preferably use C/C++ languages.
- Also, do some good projects so that you have enough content to speak about throughout the interview process.

Courses and Certification
No such external courses/certifications are required in my opinion. Just focus on the technical subjects that are taught in your course curriculum, and that would be more than sufficient.

Other Relevant Information

- Keep your calm throughout the interview process. Understand the questions that are being asked properly, and don't immediately jump to the answer. The interviewers are really friendly and you should also make yourself comfortable.
- Keep practicing coding questions and do the projects sincerely, and it should be enough to see you through. Best of luck! If you need any kind of assistance, you can contact me directly over mail/Linkedin.

<u>**Sector:**</u> IT

<u>**Name:**</u> *Aditya Deshmukh (2018A7PS0246P)*
Company: Traceable
Profile: Software Development Engineer

Recruitment Procedure
- CGPA cut-off: 7.0
- **Online Test**:
  - 10 CS fundamentals + 3 Coding Questions of easy, medium and hard difficulty. Coding questions included a BFS traversal of a n-ary tree, number of subarrays with sum divisible by k, binary search optimization + greedy approach question.
  - It was conducted on doselect platform and the duration was 1:30 hrs.
- **Technical Interviews:**
  - **Round 1:** Calculate average of input stream, given that the numbers may be very large, some OS questions.
  - **Round 2:** The following coding questions were asked:
    - https://www.interviewbit.com/problems/populate-next-right-pointers-tree/
    - https://www.interviewbit.com/problems/maximum-size-square-sub-matrix/
    - What is an MST, explain Prims/Kruskal algorithm, code it.
  - **Round 3:**
    - Given strings X and Y, find the string Z, such that X and Y are sub sequences in Z
    - https://www.geeksforgeeks.org/minimum-number-increment-operations-make-array-elements-equal/
    - A question similar to this was asked, given an array and an operation is defined as adding 1, 2 or 5 to n-1 elements of the array. Find the min operations to make all elements equal.
  - **Round 4:** HR + Resume Discussion

Sources of Preparation
- OS & Networking: Lecture Notes and Slides
- DSA: Cormen, leetcode, geeksforgeeks, interviewbit

- DBS: Knowledge Gate Playlist, do go through Interviewbit's subject-wise top interview questions during revision/final moments.

Courses and Certification
DSA, OOP, OS, Networking

Other Relevant Information
- Each round lasted for around 45 min, so make sure you prepare well for icebreakers and have sufficient knowledge about the company so as to ask relevant questions to the interviewers.
- Try to engage a little to show your interest in the company. These interactions proved to be fruitful during my HR round.
- The technical interviews were done via Google meet and coderpad was used.
- Do try to follow the STAR approach (Situation, Task, Action, Result), to describe your projects, work-experience.
- Interviewers almost say something wrong intentionally during technical rounds, you should be alert and aware as to point that out, make sure you do that in a proper manner (be humble and polite, give sound arguments as to why that is wrong).
- Be confident, ask for help if stuck, interviewers are super helpful, think aloud.
- Don't try to write the most optimal algorithm straight away if you can't. Explain what comes to your mind first and then optimize.

Sector: IT

Name: *Chahat Jain (2018A8PS0092P)*
Company: Traceable.ai
Profile: Software Engineer

Recruitment Procedure
- Coding test + 4 rounds of interview
- Test had 2 sections with 3 coding questions and 10 MCQs.
- There were 4 rounds of interviews.
- First 3 rounds were technical with focus on DSA questions. Topics asked were linked list, DP, Tries. Last round was an HR round with questions based on Resume.

Sources of Preparation
Leetcode, Geeksforgeeks archives, Interviewbit

Courses and Certification
DSA, OOP

Sector: IT

Name: *Dhruv Singhal (2017B3A70765P)*
Company: Traceable.ai
Profile: SDE-1

Recruitment Procedure

- **Round 1 (Online Coding Round) -** The test was conducted on hackerrank , duration was 1 hour and we had to solve 2 medium level questions. Clearing criteria was to solve both of them to get shortlisted.
- **Round 2 (Coding Interview 1) -**
  - This was a coding round where we had to solve a medium level problem in 45 minutes.
  - The problem was a completely new problem and the requirement was to completely think of the most optimal solution and write a readable and modularized code.
  - The interviewers were very friendly and helped us wherever we got stuck.
- **Round 3 (Coding Interview 2) -** This round was similar to Round 2 , the difference was we were asked about our internships and work experiences initially and then the coding part started in which the interviewer asked a hard problem this time.
- **Round 4 (Coding Interview 3) -**
  - This coding round was 45 minutes long, and now we had to solve 2 medium level questions.
  - Whoever was able to solve and make the interviewer understand his/her approach was sent to the next round.
- **Round 5 (HR Round) -**
  - Here as the name suggests we had an interview with an HR, where he asked about work experiences, achievements and challenges we faced during any team project.
  - Then I personally had a healthy discussion with the HR about the pros and cons of working in a startup.
  - After that they wanted to know about our enthusiasm and interests in recent technologies . It was more of a dialogue with the HR than an interview.

Sources of Preparation

- Main sources of preparation were Interview Bit for Interview based questions and

codeforces and Leetcode for practicing, increasing speed for online tests.
- Also, read previous year interview experience archives on Geeks for Geeks.
- BITS course slides were more than enough for CS subjects - OS, OOP, DSA, Networking, DBMS.
- Studied some frequently asked System Design problems and System Design basics from [Gaurav Sen Playlist](#)

Courses and Certification

As such no certifications required , you have to be strong in coding and problem solving. Having knowledge of core CS courses is a bonus.

Other Relevant Information

- Try timed problem solving as in online tests mostly everyone is able to solve all the questions and differencing parameter sometimes is the time in which you solved.
- Have a practice of giving coding interviews on Interview Bit or Pramp. Practicing on these I have devised a series of steps you must always try to follow:
  - Read the problem aloud and the understand the test cases with the help of interviewer
  - Try to figure out the edge cases and ask interviewer to explain what would be their output
  - Then always give the interviewer the brute force approach first to show him you have understood the problem and know the basic way to solve the problem
  - Then as per interviewer's requirement of optimizing space, time complexity and think of optimal solution 5) When you are a bit satisfied with the solution , dry run the test cases on your approach to figure out mistakes if any and to satisfy the interviewer
  - Code your solution and try to divide the code into functions (modularization)
  - Then after completing the code find syntactical errors if any
  - Dry run the test cases again on the code you have written which will help figure out if any error persists
  - Run the code (if interviewer asks you to)
- Note for all steps: Say whatever you think

Sector: IT

Name: *Varkeychan Jacob (2017B5A70828P)*
Company: Traceable.ai
Profile: Software Engineer

Recruitment Procedure
- Online Test, 3 Technical Interviews, 1 HR Interview
- Online Test had 3 questions, which were medium-hard level if you consider LeetCode:
  - Number of subarrays, whose sum is divisible by a given value 'M'.
  - You have to visit some cities starting from 's' and from each city, you visit all of its neighbors first. Print the order in which the cities were visited. The adjacency list was given.
  - You can make N sweets each whose degree of sweetness is given in an array of size N. Also, the i-th sweet takes arr[i] time to make, where arr is another array of size N given to you. You have M days and each day, the amount of time you can spend making the sweets are different. This also is given as another array of size M.
- Technical Round 1: Implement LRU Cache. Didn't ask the question directly, instead gave me a scenario and asked how to optimize it. The answer was caching, and then asked me to implement it. After this some CS theory questions were asked like, explaining the ACID properties.
- Technical Round 2: Given 2 strings, print a string of lowest length possible such that both of the given strings are a subsequence of this string.
- Technical Round 3: He defined a square matrix of length 2^N and showed me examples of N=1 and 2. Then asked me to print the matrix for any N. This was a little tricky as you needed to find the recurrence relation between the matrices.
- HR Round: This round lasted for only 30 mins, while each of the technical rounds were of 45 mins. In this round, we just had a normal conversation and he asked questions like why traceable and Where do I see myself after 5 years? He then went on to explain the company's vision and his experience till now.

Sources of Preparation
- LeetCode for coding questions and GeeksForGeeks for interview testimonials.
- Reading interview testimonials helped me prepare for the HR round and it can also help you estimate the level of difficulty of the interview.
- Also read about answers for questions like, why should we hire you and all.

Courses and Certification
DSA has the most importance. Other courses like OS and OOP are also important. Then comes DBMS. Theory questions from these topics are generally asked for IT interviews.

Other Relevant Information
- The interviewers generally want you to discuss the logic first before implementation because they can guide you if your logic is flawed. It is important to communicate with the interviewers about your approach.
- Also giving coding contests will prepare you for finishing the coding tests in time.
- Also you need not do competitive coding for these tests as the questions asked here will be easier and kind of straightforward compared to the competitive questions according to my experience.

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Sector: IT

Name: *Abhimanyu Sethi (2017B3A70637P)*
Company: Urban Company
Profile: SDE-1

Recruitment Procedure
- Online Coding Test -> 3 rounds of interviews
- Coding test:
- 3 medium difficulty questions to be solved in 90 minutes.
  - One question was similar to finding the number of rooms required to accommodate all meetings
  - Another had to do with finding number of overtakes that would happen in a race (Array)
  - Dynamic Programming/Hashing
  - Interview Round 1: Technical -> Given a 2d matrix and infinite queries representing top left and bottom right corners of the sub-matrix rectangle formed, return the sums of the elements in the rectangle. Optimize, solution can obviously not be O(m*n)
  - Interview Round 2: Technical, System Design using OOP concepts
  - Both these rounds included dry runs as well as writing code in a collaborative manner.
  - Final round was a managerial interview.

Sources of Preparation
GFG, InterviewBit, Leetcode

Courses and Certification
Nothing relevant here. I suppose DSA,OOP goes without saying.

Other Relevant Information
Show a lot of interest in the process, try not to tense up and pick up on the little hints the interviewer will probably give you.

Sector: IT

Name: *Keshav Sethi (2017B3A30657P)*
Company: Urban Company
Profile: SDE-1

Recruitment Procedure

- Online Coding Round and Resume Shortlisting (Open for CS, EEE, ENI with CGPA of 7)
- Test had 3 Medium level Coding. For passing all test cases you need to get the optimal solution.
- Test was of 90 mins and those who passed all test cases of 2 questions were shortlisted. After that there were three interview rounds
- Round 1:
  - This was a technical interview and only one DSA question was asked. You need to run the code and pass all his sample test cases only then you will be shortlisted for Round 2.
  - Question was of medium level and based on DFS. There you need to find the number of unique islands in a matrix like if the shape of two islands is the same then you consider that as one.
  - Interviewer was very supportive and gave me hints if needed.
- Round 2: This is a Low level Design Round. Interviewer asked me to design a Chess Game with few implementations. He expects you to know design patterns, OOP concepts and SOLID principles. Make sure you explain your approach and thoughts well.
- Round 3: It was mostly based on Resume, Networking, OS, and DBMS. Interviewer will go deep into every project mentioned in your resume. He will grill you on every word of your resume. Questions on CS subjects were basic. At the end there were some behavioral questions as well.
- NOTE: UC focuses a lot on LLD and DSA. Everything other than that was easy.

Sources of Preparation

InterviewBit, GFG, Striver's SDE Sheet, Leetcode, LLD primer.

Other Relevant Information

Complete InterviewBit, revise GFG last minute notes and always show your interest for the company's goals.

Sector: IT

Name: *Siddharth Kapoor (2018A7PS0232P)*
Company: Urban Company
Profile: Software Development Engineer - 1

Recruitment Procedure

- The process starts with a DSA based coding test followed by 3 rounds of interviews for the selected candidates, each round lasting for about 1 hour.
- 1st interview:
  - It was a DSA based problem solving round. I was asked 2 questions, the 1st one being 'Print all solutions of the N-Queens Problem (https://www.geeksforgeeks.org/printing-solutions-n-queen-problem/) '
  - This was followed by 'Implement Level-Order Traversal in a Binary Tree in a zig-zag order (https://www.geeksforgeeks.org/zigzag-tree-traversal/) '.
  - I was first asked to explain my approach, followed by coding the solution in a Google doc, in any language.
- 2nd interview:
  - I was asked to design a chess game from scratch, using object oriented principles. I wasn't required to write the entire code, but just write the classes and some of the methods, without the implementation (https://www.geeksforgeeks.org/design-a-chess-game/) .
  - The interviewer provided sufficient hints to guide me to the correct solution.
- 3rd interview:
  - It was taken by the VP of Engineering at UC. The interviewer first went through my resume, asking questions about the work I had done at my previous internships, the languages and technologies used, etc.
  - This was followed by a design question, based on implementing an LRU cache, disguised as a real world problem (https://www.geeksforgeeks.org/lru-cache-implementation/) .
  - I was also required to code my solution in a google doc, provide appropriate justifications for my choice of data structures, and explain my approach properly.
  - The interviewer mainly focused on my approach, as I was unable to code some parts, and provided hints whenever I got stuck.
- In all the rounds of interviews, it is very important to keep communicating with the interviewer, explain your thought process out loud, justify your approach, and take

note of the hints being given. Don't be afraid to ask for some help if you get stuck while implementing the solution, and clarify any doubts that you may have about the question or your assumptions.
- At the end of each interview, the interviewer asked me if I had some questions. You can use this opportunity to know more about the company, such as the culture, the tech stack being used, etc.

Sources of Preparation
- The questions asked were mostly standard questions easily available online. Leetcode, Interviewbit, Geeksforgeeks and Codeforces are some great sources to prepare.
- I would recommend sticking to Leetcode and Geeksforgeeks if you're a beginner in competitive coding or are only interested in preparing for the placement season.
- You can switch to Codeforces contests if you're generally more interested in competitive coding and have a sufficient background in it.
- Also read up on OOP principles, and know how to use them in at least one language, preferably Java or C++.
- You can also prepare DBMS, OS and Networks, as although these weren't asked, they can be helpful for interviews in other companies.

Courses and Certification
I do not have any certifications from Coursera, Udemy, etc, and have only done the courses offered here at BITS. Some of the courses I've done are:
Data Structures and Algorithms, Design and Analysis of Algorithms, Computer Networks, Operating System, Object Oriented Programming, Database Systems, Cryptography, Computer Architecture, Network Programming, Foundations of Data Science

Sector: IT

Name: *Siddharth Singh (2017B4A70549P)*
Company: Urban Company
Profile: Software Development Engineer

Recruitment Procedure

- Coding round followed by 3 interview rounds
- The 3 interview rounds were Technical, Software Manager and Senior Manager.
- The technical interview had simple coding questions like "Find median size of islands in an array".
- The Software Manager asked design questions like "Design a carrom/chess game. Write all the relevant classes/interfaces." Only pseudo code is expected here.
- The senior manager asks about previous internships/projects, how deeply you approach problems, how to test solutions and why you want to work here. No coding questions in the last round.

Sources of Preparation

Interview Bit, GFG questions, Hackerrank questions.

Sector: IT

Name: *Chinmay Hebbar (2017B4A80448P)*
Company: Visa
Profile: Software Engineer

Recruitment Procedure

- Online Round - 2 Questions. Problems are very easy, time of submission is the most important factor.
  - Simple problem involving strings.
  - Given a matrix with '.' (unblocked) and '#' (blocked) cells. Determine if you can reach from the starting position to the end position (both of which are unblocked) in at most k moves.
- Round 1:
  - Some discussions on projects. As I had backend experience, questions on stateless/stateful APIs, REST API methods and session authentication were asked.
  - A puzzle on measuring 45 minutes time using two sticks that take 60 minutes to burn.
  - Coding problem, https://www.geeksforgeeks.org/count-pairs-difference-equal-k/
  - Network question, https://www.geeksforgeeks.org/what-happens-when-we-type-a-url/https://www.geeksforgeeks.org/what-happens-when-we-type-a-url/
- Round 2:
  - Only discussion-based, no code involved.
  - Some OOP questions, stack Vs heap memory.
  - Check if a binary tree is a BST. (only solution approach)
  - Algorithm-Design Problem - Estimation of time in a food delivery platform. Mention all relevant parameters like location of delivery person from restaurant, queue of orders at restaurant, queue of deliveries for delivery person etc.
- Round 3:
  - Conducted by a former BITSian, and mostly involved HR and project-related questions.
  - Explain any challenge you faced and how you overcame it?
  - How did you get into programming from a math/electronics background?
  - How would you assess yourself in the previous two rounds?

Sources of Preparation
- Codechef/Codeforces (for developing intuition)
- InterviewBit
- Geeksforgeeks (for everything!)
- GateSmashers (maybe useful for OS)

Courses and Certification
Some Coursera certificates, not very relevant.

Other Relevant Information
- For coding or design rounds, try to clarify the problem statement, assumptions (assertions) and constraints as much as possible.
- Try to explain your projects or coding/design/puzzle solution approaches, in accordance with the SDLC principles.

Sector: IT

Name: *Jwalin Mehta*
Company: VISA
Profile: Software Engineer

Recruitment Procedure

- Online Test, 2 Technical Rounds, 1Technical/HR Round
- In the online test there were 2 simple coding problems. One of them was to find the total number of ways to reach (n, m) from (1,1) in a grid where some elements of the grid are blocked.
- The first 2 technical rounds were mainly DSA based and they also asked me questions based on my resume. Most of the questions were simple. The questions were like:
  - How would you design an algorithm for any problem?
  - Print some patterns using for loops
  - Print all Fibonacci numbers less than given numbers.
  - One question was: If you have details of restaurants in your area and you want to order food then what parameters will you consider to find which restaurant will deliver the food fastest to your home?
- Last interview round:
  - We started with some basic HR questions and then he asked me questions on my resume.
  - Then he asked me a question similar to the egg drop problem.
  - Then he asked me what different parameters are required if you want to create lift. Like when should lift entertain requests, if lift is going upward to 4ᵗʰ floor and if someone on the 3rd floor wants to go downwards then lift shouldn't stop. We discussed different possible scenarios and which conditions should be there.

Sources of Preparation
GeeksforGeeks, Interviewbit, Leetcode

Courses and Certification
DSA, DBMS, OOP, OS

Other Relevant Information

Make sure you practice as many questions as possible on dynamic programming and graphs. Revise OS, DB and OOP before interviews. You can go through commonly asked interview questions available on interviewbit for OS, DB.

Sector: IT

Name: *Naman Goenka (2018A7PS0398P)*
Company: VISA
Profile: Software Developer

Recruitment Procedure

- Online Test :
  - This test had 2 easy-moderate questions in 1 hr test, different people had different sets of questions.
  - One of the questions was: Given an array and a non negative integer k, find a number of distinct pairs (a,b) such that a + k = b , a and b belong to the array. Two pairs are distinct if any of the a or b is distinct.
- Technical Round 1 :
  - Started with formal introduction, followed by normal resume discussion and some basic CS fundamental questions.
  - I was asked to code one question on the codepair platform and also run the code on available 13 test cases. The ques was: Given an integer total, calculate the number of possible ways to achieve total as a sum of the weights of items weighing integer weights from 1 to k inclusive. ex total = 8, k = 2 ; ans = 5.
  - Brute force wasn't accepted, naive DP was accepted and was further asked to reduce space complexity in the naive implementation.
- Technical Round 2:
  - This round started with detailed discussion of all the projects and work experience mentioned in the resume.
  - Some follow up questions were also asked like description of an API endpoint responsible for taking a file input from a user.
  - Further this round was heavily focused on CS fundamentals : some of the questions I was asked where (not directly): Explain OOP to a layman, multiple inheritance and interface inheritance from language design point of view (contrasting cpp and java), Java packages and collections, their advantages, features of Java like portability, how image would be stored in a mysql database (can also develop ideas if not knowing actual answer), doubling strategy in arrays, questions about functional programming

paradigm, can a OS be developed using a fully functional programming language, etc.
  - Ended with some HR questions.
- Technical/HR Round 3:
  - This round started with basic resume discussion. Further asked a standard CN question that what happens when we enter google.com in a web browser.
  - I was also asked to pinpoint the most probable single point of failure in this procedure of opening a URL in the browser.
  - Followed by HR questions like most disliked CS subject, major setback in life so far and how I overcame it.
  - Higher studies questions are to be defended really well especially if you have a couple of research projects / publications in your resume.

Sources of Preparation

Course slides for OOP, OS, DSA (theory), CN, leetcode + gfg for coding questions, gfg must do interview questions, and GFG archives and most commonly asked questions for last minute preparation.

Courses and Certification

Nothing as such, just on campus CS curriculum of OOP, DSA, OS, CN, DBMS.

Other Relevant Information

Please ask interviewers questions about the organisation when they prompt you to do so for showcasing interest in the organisation. Be confident and optimistic throughout the process. All the best.

Sector: IT

Name: *Shubhechchha Mudras (2018A7PS0156P)*
Company: VISA
Profile: SDE

Recruitment Procedure

- Online Test, 2 rounds of technical interviews & 1 hiring manager interview.
- Test had 2 questions to be solved in 1 hr. Test was of medium difficulty. I could solve both questions completely.
- Technical Interview 1:
  - This interview started with Ice breaking questions such as tell me about your family, what brings you here today, why engineering, etc.
  - He gave me a simple math puzzle. Was checking my ability to understand the problem rather than the solution.
  - This was followed by a simple Fibonacci coding question. He was checking how I approach a problem, my ability to write concise, readable and efficient code.
- Technical Interview 2:
  - Tell us about yourself
  - A coding question where coding wasn't required. Just tell him your approach and optimize it as you proceed. Was checking my understanding of data structures and if I could use the right data structure at the right time.
  - Puzzle- They care more about the thought process and logic rather than the answer. Have a structured approach to solve the problem and don't guess or make assumptions. Ask for clarifying information if necessary.
  - Questions about my internship project (Not just the implementation aspects but the theoretical aspects as well)
  - This was followed by CS Fundamentals questions such as what is the difference between sets and maps, inheritance, polymorphism, what happens between typing a URL in browser till you get the data requested.
  - HR questions such as why VISA? Why should we hire you? Talk about any challenge that you faced in life etc.
- Hiring Manager Round:
  - Tell me about yourself
  - How would your friends describe you? What is the one advice that your friends would give you? What are your career aspirations? Where do you see yourself in the next 5-10 years?

○ Explain your experience of internship? What challenges faced? Describe your project, what value did that add? What would you like to go back and change in your project in order to modify it? Are you willing to relocate?

Sources of Preparation

Leetcode and InterviewBit for coding prep, GFG for last minute CS fundamentals (OOP, DBMS, OS, Networks) prep.

Other Relevant Information

- You need to be able to convince the recruiter why you wish to join that particular organization and not work in some other sector.
- While you prepare for project related questions, make sure you don't only focus on implementation and logic. You need to know what problem you are solving, why this particular approach, what were the setbacks, what could be improved (Never say no improvement needed. However minor the modification is that you can think of, go ahead and say it). Always give a practical situation where this project can be brought into use.
- Moreover, be confident, if you haven't learnt about a particular concept before, speak up that you don't know. The interviewers won't grill you on something you don't know.

Sector: IT Consultant

Name: *Rohan Malik (2018A4PS0780P)*
Company: Wipro
Profile: Project Engineer

Recruitment Procedure
- Online Test; Business Discussion Interview
- **Online Test:** The test was scheduled for 2 hours and consisted of 4 sections:
    - English Aptitude: Simple questions checking grammar and Reading Comprehension skills. (18 questions in 18 minutes)
    - Data Interpretation: Logical and quantitative deductions were to be made based on data given in the form of tables and graphs. (14 questions in 20 minutes)
    - Basic Coding Round: 2 questions were given, one on Strings and the other on Arrays. Questions were not tough and optimized solutions were also not expected. (2 questions in 60 minutes)
    - Essay Writing: Purpose is to check grammatical skills. Topic was related to 'Effect of High Screen Time on the Youth'. 100-400 words to be written in 20 minutes.
- **Business Discussion Interview:** Purpose of the interview is to check the candidate's business acumen and understand whether he/ she would fit into the company's culture.
    - It started with discussion on points mentioned in my resume, regarding the kind of projects worked on and PORs.
    - Since I was a part of Team Anant, work done by my subsystem was discussed.
    - Indirect questions were asked based on scenarios given to check response to different situations and decision-making skills.

Sources of Preparation
CAT mock tests for online test rounds and thorough understanding of everything mentioned in the resume.

Other Relevant Information

Be confident with your communication skills and prepare for generic questions asked in the interview beforehand.

Domain:

MECHANICAL

Sector: Mechanical

Name: *Arpan Kumar Sharma (2018A4PS0580P)*
Company: Bajaj Auto
Profile: Graduate Trainee Engineer (GTE)

Recruitment Procedure

- Two online tests:
  - Technical and Aptitude Test:
    - 90 questions and 90 minutes. 1 for correct answer and -0.25 for incorrect.
    - The test is divided into two parts, 45 Technical questions (mostly from IC engines and strength of materials) and 45 aptitude questions consisting of English, logical and analytical reasoning.
    - Shortlisted candidates go for the next test.
  - Psychometric Test: Questions regarding your personality. There is no right or wrong answer for these questions. Just Be honest. Shortlisted candidates are called for the interview. During my process, six students were selected for the interview.
- Technical Interview: Questions from resume. 90% of the questions were from my IC engines project. A mix of theoretical and practical questions. Shortlisted candidates are invited for the HR interview. During my process, only one candidate was selected.
- HR interview: A normal conversation about your personal life, campus life and your preferences about higher studies (I told them that I don't have any plans to go for higher studies in near future.)

Sources of Preparation

- Class notes of IC engines classes. The syllabus taught in BITS is more than enough to crack the technical interview.
- *Internal Combustion Engine*s by V Ganesan. It is also the textbook for IC engine course.
- GATE notes from gatehunt.com. They will help you to have a good command of core concepts.
- For the HR interview, practice with your friends. It is the best way to prepare for

HR interviews.

Courses and Certification

No specific certifications required. The most important course is Internal Combustion Engines, which is a CDC.

Other Relevant Information

- Go through your resume very carefully. You should know about everything you are mentioning in your resume.
- Revise the concepts of casting, welding/joining, gear and gear trains, IC engines, thermodynamics cycles and strength of materials. Most of the questions come from these topics.
- Read the reports of your projects before the interview.
- Read about the company before the interview. Read about their goals, products, initiatives, and recent achievements.

Sector: Mechanical

Name: *Ashwin Kumar Devanand Parkhi (2020H1060203P)*
Company: Faurecia, Pune
Profile: PGET

Recruitment Procedure
- Resume Shortlisting, Technical Test, Technical interview, Managerial interview and HR
- Test pattern
  - The test was held online, and had 100 questions in 120 minutes.
  - Questions were from fundamentals of Mechanical Engineering subjects like Manufacturing, SOM, Finite element analysis, Aptitude questions (Quant,Logical and English)
- Interview
  - Technical and Managerial interview for me unfortunately happened at the same time.
  - Technical interview started with-Introduce yourself with highlights on Family background, education, projects, extracurricular activities, hobbies.
  - Followed by discussion on "How M.E was different from BTech, and what interested me throughout my academics?" and "What I have learned on the particular subjects, which I have mentioned in my resume?"
  - Then the interviewer moved on to the brief introduction on projects mentioned.
  - Then after the projects there were basic questions on SOM, topics- plain stress and plane strain, creep, fatigue, Theory of failures etc.
  - In managerial, I was asked about my achievements, biggest regret, strengths, weakness etc
- HR had 3 situation questions about team management.

Sources of Preparation
GATE Notes, thorough study of project reports

Other Relevant Information
- Stay calm during interview
- Don't rush on the answer, think well and then answer
- If you don't know the answer then politely say that you don't know it or are unable to recall or tell him the approach of the answer.

Sector: Mechanical

Name: *V.N.S. Venkateswarlu (2020H1410147P)*
Company: General Electric (GE)
Profile: Edison Engineering Development Program (EEDP)

Recruitment Procedure

- Online Test, Technical Interview, Managerial Interview, HR Interview.
- Online Test-
  - In this total 80 questions were asked. The test was divided into two sub-tests.
  - 50 (English, Reasoning, Apti) (50 Q-50 mins) +30 (Technical) (30 Q-30min).
  - English Language(10 Q)- Half of the questions were from a passage. The rest were easy ones like filling in the blanks, finding the incorrect sentences, etc.
  - Analytical Reasoning (20 Q)- Questions like circular seating arrangement, statement-conclusions, folding, making a hole and unfolding a paper,flowchart, analytical coding-decoding etc
  - Quantitative Aptitude (20 Q)- Percentages, Cost price-selling price, time and work, speed distance and time, data interpretation, etc. No questions on probability, permutations were asked, even though I expected a few.
  - Technical (30 Q) - Topics covered- Strength of materials, Machine Design, Production, Fluid Mechanics, Thermal, Material Science. Almost 10 Questions were direct(easy). 15 were a little thought-applying questions. Either they needed two step calculation or ESE prelims level preparation. 5 were a little difficult to think about.
  - English language, Analytical and Quant, together had 50 questions and was given 50 minutes of time to answer these. After submitting these, a new timer of 30 mins for technical questions will appear (30Q-30min) After the online test results were announced, the interviews happened.
- Technical Interview, Managerial Interview, HR interview happened on the same day. Technical interview was for half an hour. Managerial interview and HR interview happened around 20-25 mins.
- Technical Interview:
  - Start with introducing yourself. Prepare all your Projects well. And prepare to explain at least 2 projects perfectly.
  - It should be explained in a particular way. starting with the need, then the

problems faced and how did you overcome them, in a technical fashion. This explanation should be done in 10-15 mins at most.

- There will be a lot of cross-questions related to the project that you are explaining. He will definitely try to check the basics in that project.
- Then comes technical questions on your favourite subjects. Questions were asked on Strength of materials, Machine Design, Fluid mechanics(only if your projects are aligned towards it), Thermodynamics(Especially Turbines topic as GE comes for Gas Power recruitment mostly.
- Although they don't go into too much detail in this topic) Understanding of FEM, CFD (If taken), Vibrations (Many were asked questions on this, again not too much detail) . These topics should suffice.

● Managerial Interview:
- Start with introducing yourself. The person who will interview you in this round will mostly be your direct manager. Be humble and just answer things with confidence.
- Here very few questions were asked to me around FEM CFD and mostly they tried to know my managerial skills and how will I manage in projects with a lot of people in it.
- Questions like what is your one of the best memories in your life that you are proud of, and a situational question like if there is a team with a lot of groupism, how will you manage etc were asked.

● HR Interview: Start with introducing yourself. The questions were easy. They just try to assess your skills other than technical. Questions asked were:-
- Why Mechanical Engineering?
- There was a project we did in which 12 members were there. So the interviewer wanted to know how I overcame the problems and managed the team to lead a good project.
- I mentioned I liked learning so he asked me what are the few things that I learnt.
- Why GE EEDP? (A compulsorily asked question)

Sources of Preparation
GATE Notes, ESE prelims and Gate previous 5 years solved questions.

Courses and Certification

edX - A Hands-on introduction to Engineering Simulations (Although no question was asked on this)

Other Relevant Information

- For English, Apti and Reasoning, speed and accuracy play a huge role. Save time at one section and utilize it at another. Don't waste time, just skip if you are not getting the answer.
- For technical, it is suggested to have strong formulae and concepts in mind and at least go through previous 5 years of ESE Prelims and GATE. That should mostly suffice.
- The technical interview will mostly test your basic undergrad concepts only. Don't try to read the whole subject. Just make smart choices and read only important basic concepts.
- Always know about the job profile and the company, before you sit for an interview. And definitely prepare 1-2 questions to ask at the end of every interview. Show how curious you are to learn and join.
- Most importantly, if you are aiming for this company, make sure you align your projects and goals towards one side, be it either Mechanical Design(Projects done in FEM, Fracture Mechanics etc) or Thermal (Fluid Mechanics, CFD, Thermal projects etc). They don't entertain multi-directional approaches. They look for a guy with a unidirectional approach in the kind of projects you choose and work on.

Sector: Mechanical

Name: *Ajit Suryakant Jadhav (2020H1060206P)*
Company: ISGEC Heavy Engineering, Yamuna Nagar
Profile: PGET

Recruitment Procedure

- Resume Shortlisting, Technical Test, Technical and HR Interview
- Test pattern:
  - The test was held on-campus, and had 45 questions in 50 minutes.
  - Questions were from fundamentals of Mechanical Engineering subjects like Thermodynamics, Material science, SOM, Aptitude questions, 11th and 12th Math
- Interview:
  - Technical and HR interview was at the same time.
  - First started with an introduction with highlights on family background, education, projects, extracurricular activities, hobbies.
  - Panel of 3 members was there and one of them asked to draw the design of my B.Tech project on paper. Then questions were asked on the same.
  - Questions were also asked from geometric dimensioning and tolerancing, machine tools.
  - Basic SOM questions on design of shaft, springs, gears.
  - Why are the rear tires of a tractor larger than front ones?
  - How will you calculate the coefficient of friction between surface and body without using any sophisticated instruments?

Sources of Preparation

GATE Notes, thorough study of project reports

Other Relevant Information

- Stay calm during the interview
- Hear the questions properly. Don't rush to answer, think well and then answer
- If you don't know the answer then politely say that you don't know it.

Sector: Mechanical

Name: *Pushp Agarwal (2020H1410162P)*
Company: ISGEC
Profile: PGET

Recruitment Procedure
- Resume shortlisting, written test, interview
- Test had 2 sections:
    - Technical (from B.Tech)
    - Aptitude
- Test was easy. The difficulty level was moderate and the time was enough to complete the test. The test was taken in pen-paper mode.
- Interview questions:
    - Tell us about yourself.
    - What do you know about the company? (They even asked the share price of the company)
    - What is CFD and its application?
    - A question based on a rod (from SOM), physics and mathematics (trigonometry)
    - A power transmission arrangement based question

Sources of preparation
Basics from B.Tech concepts would suffice. However, some concepts from basic physics from S.S.C should not be ignored as they asked the questions related in the interview as well as in the test.

Courses and certification
No subject as such. The candidates were asked questions from the basics only. There was no such importance given to the courses and certifications.

Other Relevant Information

Just stick to the basics and try to make every problem as simple as possible using them. Be calm and confident. Being confident will make more than half the work done.

Sector: Mechanical

Name: *Abhishek Gupta (2020H1060226P)*
Company: Ola Electric
Profile: Vehicle Engineering

Recruitment Procedure
- Shortlisting, Technical interview, HR
- Technical interview consisted of two rounds.
  - The round 1 interview started with my introduction, then the follow up questions were asked from the projects that I have mentioned during my introduction and resume.
  - The round 2 interview also started with introduction and then the follow up questions were heavily focused on the Ola Electric scooter.
- HR Round consisted of introduction and interest in the company.
- Interviews were easy as they were heavily based on my projects which were on electric vehicles and battery management.

Sources of Preparation
Prepare the projects completed during your education and your role in them.

Courses and Certification
No subjects as such but having knowledge in the electric vehicles technology would be an advantage.

Other Relevant Information
Most job interviews consist of basic subject knowledge but this interview did not have any questions from the subjects. To prepare for the interview make sure to research about the company and be thorough with your resume.

Sector: Mechanical

Name: *Akhil S V(2020H1420197P)*
Company: Ola Electric
Profile: Vehicle Engineering

Recruitment Procedure
- Resume Shortlisting, 2 technical interview, HR interview
- First Technical Interview: Duration was around 20 minutes. Asked questions about Internship, Gear Mechanism, Welding process related with respect to Automobile sector, one situation question based on Quality control subject point of view.
- Second Technical Interview:
    - Duration was around 25-30 minutes. Focus was towards my project which I did in the electric vehicle domain.
    - The interviewer asked my favorite subject from the manufacturing subject point of view and told me to explain briefly with examples in each concept with respect to the Automobile Industry.
    - He asked one problem related to cooling load which was a bit difficult but he was friendly and gave hints to answer the problem accordingly.
- HR interview: Duration was around 10-15 minutes. Casual and very easy interview.

Sources of Preparation
Manufacturing Process, Quality control, Toyota Production System

Other Relevant Information
My bachelor's project and Research Practice which I am currently doing was in the field of Electric vehicles.

Sector: Mechanical

Name: *Anmol Pagaria (2020H1410156P)*
Company: Ola Electric
Profile: Assistant Manager - Vehicle Engineering

Recruitment Procedure

- Application Shortlisting, Technical Interview-1, Technical Interview-2, HR Interview.
- Application: Educational Qualifications, CGPA, Details of Project & Internships, Resume (Superset Format).
- Technical Interview 1:
    - Focus on Subjects like SOM, Material Science, Vibrations, and Fracture Mechanics.
    - Questions were application-based.
- Technical Interview 2:
    - Questions on Previous Experience (explain your job profile), Internship Projects, College Projects.
    - Questions from Resume.
    - Generic Questions like:-
        - "Give an example of instances where you used your leadership skills."
        - "What are your most cherished Accomplishments?"
        - "What are your hobbies?"
- HR Interview
    - "Tell me about yourself?"
    - "Why do you want to work with us?"
    - "What kind of job profile do you expect?"
    - "Can you work in a fast-paced environment?"
    - "Are you OK to work during weekends and in shifts?"
    - "Any questions that you would like to ask?"

Sources of Preparation
GATE exam topics, Project Summary, Internship Summary, Generic HR Questions.

Courses and Certification

No subjects as such. Knowledge and use of CAD softwares in projects can be an advantage.

Other Relevant Information

Read the job profile and job description carefully and prepare some questions around them.

Sector: Mechanical

Name: *Anuj Nandal (2020H1410161P)*
Company: OLA Electric
Profile: Vehicle Engineer

Recruitment Procedure
- Resume was shortlisted by the company
- There were two rounds of Technical Interview, both were of about 20 min.
  - In Round 1 the interviewer asked a little about us, and asked in depth from one project out of the list of others.
  - In Round 2 the questions were related to all the things that I had written in the resume, including the projects as well as my prior work experience.
- Next was a HR round scheduled for 10 min, where we were asked how our contribution will benefit the company, and if we were comfortable working on site, or in a remote location.

Sources of Preparation
Since the company was recruiting for the first time, we did not have a lot of sources on the internet. I was well prepared with the details I had given in the resume. I read about the vision and future that the company was planning to move ahead towards. The official Company website as well as their social media, gave a pretty clear idea about it.

Courses and Certification
I had done a certification of a Master in Diploma of Product Design and Analysis which helped the company assess my value.

Other Relevant Information
- In the interview it is important to stay calm and smile.
- If there is something the interviewer has asked that you are not able to immediately answer, ask for some time to think.
- Have a pleasant greeting before starting and after ending the interview to end on a good note.

Sector: Mechanical

Name: *Ayush Kumar (2018A4PS0548P)*
Company: Ola Electric
Profile: Vehicle Engineering

Recruitment Procedure
- 2 Technical Interviews and 1 HR Interview
- 1st round of technical interview:
  - Started with a brief introduction about myself of which I took the opportunity and directed the interview towards my work in my technical team which aimed at building formula style race cars.
  - So, the remaining interview was totally focused on my technical work and contribution in the team, especially about 'Vehicle Dynamics' since it matched with the job profile.
  - Apart from this they asked about my summer internship, just a brief overview about it.
  - They also asked about my POR and what particular changes I brought to my team as a POR holder.
- 2nd round of technical interview:
  - Totally focused on my mechanical subjects. They initially asked for my top 2 preferences of the subjects which was followed up with theoretical and numerical questions related to the respective subjects.
  - So the first subject was Mechanism and machines while the other one was Mechanics of Solids the questions I was asked are as follows:
    - Draw a 4 bar and 6 bar mechanism and what is the difference between them.
    - To this I answered the difference in terms of number of degrees of freedom which led to a follow up question: What are the maximum degrees of freedom the 6-bar mechanism can have if 2 of its links are fixed? Explain the different cases based on which two links are being fixed?
    - Does the length and geometry of links influence the degrees of freedom the system has?
    - The next set of questions were for mechanics of solids
    - What is Mohr's circle and why is it on the x and y axes?
    - What will happen to the Mohr's circle if the principal stresses become 0?

- - Then the interviewer gave me a numerical problem which included a beam fixed from both ends with a load at its centre and the question asked what would be the new cross-sectional dimensions of the beam w.r.t. the old ones if I want to reduce the mass by half while maintaining the same stress bearing capability it had originally. I was given 5 minutes to come up with the answer.
  - The HR round (3rd round) had typical HR questions as follows:
    - What makes you different from others for this role?
    - How ambitious are you in life?
    - They asked about my internship
    - Will you be fine if we call you to work for 13 hours a day?
    - The HR round was not for eliminating anyone it is just for a final check on everyone they have shortlisted based on previous rounds.

Sources of Preparation

Not any particular source, there are many videos available on the internet for quick revision of subjects that I referred to along with my course notes.

Courses and Certification

Due to my role in the technical team in college, I had a good knowledge of 'Vehicle Dynamics' which was pretty much related to the job profile the company was recruiting for. So, this proved to be a great advantage for me. The course is available on NPTEL, taught by Dr. R. Krishnakumar from IIT Madras.

Other Relevant Information

Overall, whatever they asked was based on your subject preference and your work in the college. So, a good command in 2 or 3 subjects along with the work/projects you have done in college is necessary and sufficient. This is generally the case for most of the core companies.

Sector: Mechanical

Name: *Gangireddy Vineeth Reddy (2020H1060220P)*
Company: Ola Electric
Profile: Vehicle Engineering

Recruitment Procedure
- Resume Shortlisting, Technical Round-1, Technical Round-2, HR
- In Round-1 following questions were asked:
    - Tell us about yourself
    - Projects which you have done in your M.E. /B.E.
    - As I did my project on Li-ion batteries, more questions were based on batteries, its working, what battery capacities were used in E.V. etc.
    - Questions related to transmission systems, brake systems.
- In Round-2 also more focus is given on projects which I did, and some real-life problem scenarios were asked. Also, questions based on transmission systems were asked.
- In the HR round, general questions to test our personality were asked like what makes you different from others in Pilani campus, why did you choose to do masters etc.

Sources of Preparation
Have a clear understanding of your project and search relevant information about the company.

Courses and Certification
Not required. In case you have any certification in electric-vehicle domains, it will be an advantage.

Other Relevant Information
Carefully go through the job description and have some questions to ask them at the end of the interview.

Sector: ET

Name: *G Siba Prasad (2020H1400176P)*
Company: Ola Electric
Profile: Vehicle Design- Electric Role

Recruitment Procedure

- Resume Shortlisting, Two rounds of Technical interviews, HR
- Technical Interview:
  - In the technical interview there were two rounds. One was completely focused on basics of Embedded Systems and Operating system concepts and the second one on academic projects.
  - Questions were from ARM architecture, mutex, semaphore, low power techniques, interfacing of sensors, and bus protocols. Also few questions were from Mosfets.
  - The academic project discussion went mostly on my embedded project. I was asked to explain the complete project with follow up questions in between. Also asked about the sensors used and its possible replacements if any.
- HR Interview:
  - Why do you want to join OLA Electric?
  - Expectations, Long term and also asked about the newly launched products.

Sources of Preparation

Class notes and lectures for Embedded System, Geeks for Geeks, YouTube videos (GATE Smashers for OS)

Courses and Certification

Digital Electronics, Embedded System Design, Real Time Systems

Other Relevant Information

Most of the questions were related to projects done. Follow up questions can be expected from each part.

Sector: Mechanical

Name: *Harsh Kulkarni (2018A4PS0830P)*
Company: Ola Electric
Profile: Vehicle Engineering

Recruitment Procedure

- Resume Shortlisting, Two Technical Interviews, HR/Management Interview
- Interview Questions:
  - Tell us about yourself (Academics+Projects+Ambitions) and follow up questions from what you answer
  - Mainly asked about Projects + Previous Internships, should be very thorough with this.
  - Also a few questions were about subjects that you mentioned that you liked.
  - Why would you like to join the company?
  - What are your expectations of work and work culture?
  - What are your objectives as an individual?

Sources of Preparation

- Be thorough with your projects and have a very good grasp of the fundamental subjects.
- Be ready to derive all the basic and fundamental equations with the appropriate assumptions as your thought process will be tested.
- Course notes and slides would do the job.

Courses and Certification

Asked to mention your favorite courses, then we were asked questions on those courses so you should be ready with a few courses that you are confident in.

Other Relevant Information

- It is very important to note that most interviews are to analyze your fit within a company. Asking appropriate questions to the interviewer is important.
- Make use of the time given at the end of each interview to ask these questions, preferably keep a few questions ready for this apriori. If you can see the profile of the interviewer and ask him a few questions based on that it is always a plus.

Sector: Mechanical

Name: *Makam Kishore (2020H1410158P)*
Company: Ola Electric
Profile: Vehicle Engineering

Recruitment Procedure
- Resume Shortlisting
- Technical Interview 1:
    - The questions were related to the projects mentioned in the resume.
    - The questions I was asked were related to vehicle dynamics concepts.
- Technical Interview 2: The interview was similar to Round 1 interview, but the higher level concepts of projects were asked.
- HR Interview

Sources of Preparation
Automobile basics and vehicle dynamics textbooks.

Courses and Certification
Courses related to Electric vehicle design in Edx. Decibels lab course on EV

Other Relevant Information
- Keep your resume fair
- Do not bluff the interviewer with wrong information while answering the questions.

Sector: Mechanical.

Name: *Maria Sylvester Vivian (2020H1410150P)*
Company: Ola Electric
Profile: Engineer (Vehicle Engineering Department)

Recruitment Procedure
- Resume Shortlisting
- Technical Interview Round 1
- Technical Interview Round 2
- HR interview

Sources of Preparation
- Prepare a document with your answers for standard interview questions , Develop an intro of yourself highlighting all your projects and strengths etc.
- Basic preparation for aptitude and tech questions from online resource like Indiabix website etc. and refresh GATE fundamentals
- Being very presentable and having a clear mind before interview, without being very desperate to get a job

Other Relevant Information
During the resume shortlisting and in the interview, my tech team projects like BAJA, Shell Eco Marathon, IRC etc helped me express my interest and drive the interview

Sector: Mechanical

Name: *P Raghu Vamsi (2020H1060205P)*
Company: Ola Electric
Profile: Vehicle Engineering Role

Recruitment Procedure

- Resume Shortlisting, 2 technical rounds, 1 HR round
- In both the technical rounds the interviewer asked about a national level competition (Efficycle) I had participated in during my UG course. As I had worked on electric vehicles before, the questions were mostly based on it.
- For example, I was asked what was the power and type of the motor used, the maximum speed vehicle attained, any problems faced in the competition and the reason for the failure.
- Also, I was asked about the projects I had worked upon during masters and I explained them briefly to the interviewer.
- In the HR round I was asked to introduce myself (about my career till this point viz., UG & job) and I was also asked about my personal interests. At last, I was asked which area I would like to work in the company.

Sources of Preparation

Revised the fundamentals of subjects studied during UG. Also, I slightly brushed up upon the PG subjects of semester 1 & 2.

Sector: Mechanical

Name: *Shravan Vinayak Patankar (2020H1410145P)*
Company: OLA Electric
Profile: Vehicle Engineering

Recruitment Procedure
- STEPS: Resume Shortlisting, Technical Interview-1, Technical Interview-2, HR

Interview.

- Resume Shortlisting: In my view the resume being submitted in this step must be "slightly" modified to suit the job description mentioned by the company.
- Technical Interview-1: The questions were mostly based on the technical aspects of the resume. The interviewer was keen at knowing about the projects & internships completed in the past.
- Technical Interview-2:
  - The level of technical questions being asked in this interview was at a higher side compared to the first technical round.
  - The interviewer used to pick up a point mentioned in the resume and used to ask detailed questions on the topics connected to the same.
  - A wide range of questions covering the complete scope of mechanical engineering starting from manufacturing & metallurgy to mechanisms & control systems were asked during this interview.
- HR Interview: Following set of questions were asked:
  - How is design engineering special than other branches & what are its USPs?
  - What are your future ambitions in a professional setting?
  - In which sub-department would you like to work & why?

Sources of Preparation

- Just going thoroughly through the resume and ensuring to get highly conversant with the technical terms and fields of study connected to the content of the resume.
- Brushing up the very fundamentals of mechanical engineering such as kinematics of mechanisms, basic assumptions in fluid mechanics theory, etc.

Other Relevant Information

Be truthful & genuine during the interview process but do not hesitate in putting your thoughts/ideas in front of the interviewer.

Sector: Mechanical

Name: *S Mani Krishna Hemanth (2020H1060204P)*
Company: Ola Electric
Profile: Vehicle Engineering

Recruitment Procedure
- Technical interview round 1, Technical interview round 2, HR
- Questions in Technical interview:
  - Tell me about yourself

- Academic projects done by you.
- Questions Related to Mechanical Engineering subjects such as Machine design, Design of machine elements, Automobile Engineering.
- Few Questions related to your knowledge in Electric vehicles (Systems present in Electric Vehicle)
- Questions in HR interview:
  - Tell me about yourself
  - Why did you choose this company and the role which best suits you to work?

Sources of Preparation

- Go through Machine design, Design of machine elements (especially transmission elements such as gears, belt drives) and Automobile Engineering (suspension system, steering and braking systems).
- It is good to have knowledge on Electric vehicles (working of a motor, systems in Electric vehicle).
- Related to thermal aspects, go through cooling systems required for battery and rotor.

Courses and Certification

It is good to do a course in Electric vehicle systems (not mandatory).

Other Relevant Information

Try to be familiar with your projects that you mention in your resume and go through aspects related to optimization of the vehicle body.

Sector: Mechanical

Name: *V Balaji Srinivas (2020H1410148P)*
Company: Ola Electric
Profile: Assistant Manager- Vehicle Engineering

Recruitment Procedure

- Resume Shortlisting, 2 rounds of technical interview and an HR interview
- Questions related to vehicle geometry, suspension, academic projects, company projects were asked.

Sources of Preparation
Be thorough with your resume

Sector: Mechanical

Name: *Gharge Akshay Kamalakar (2020H1420191P)*
Company: Schlumberger
Profile: Mechanical Engineer

Recruitment Procedure
- Resume Shortlisting, GD, Technical + HR Interview
- Every round was eliminative.
- **GD Topic**: Impact of covid pandemic on Indian economy
- **Technical + HR Interview**: Interview duration was about 35 minutes.
- Questions Asked:

- Technical Questions:
    - Questions based on Resume.
    - Interview was mostly in the direction of B. Tech final year project.
    - Questions based on design, manufacturing, data science areas related to your project.
    - Questions on basic mechanical subjects like SOM, manufacturing.
    - Which theory is used for design?
    - Which heat treatment methods are used?
    - What materials are used during manufacturing?
- HR questions:
    - As my project was product-based HR asked how you will sell your product to a customer?
    - How will you manage the team having a different idea of approach on the same project?

Sources of Preparation

Prepare each and every term written in resume properly. Revisit all projects and internships. Revise basic subjects of mechanical engineering from GATE class notes.

Courses and Certification

Certifications are not prerequisites.

Other Relevant Information

Most R&D job profiles will ask for a strong technical profile. So, prepare all projects in your Masters and Bachelors which are relevant to practical engineering applications and justify the results of projects properly.

Sector: Mechanical

Name: *K Eshwara Venkata Abhinay (2020H1420192P)*
Company: Schlumberger
Profile: Mechanical Engineer Role (Internship)

Recruitment Procedure

- **Round 1- Resume shortlisting:** It was just a formality and all the people who applied were shortlisted for the next round.
- **Round 2 - Group Discussion:**
  - It was an online group discussion and we were around 7-8 people per panel. We got "Impact of COVID 19 on India's economy" as a topic.

- ○ It was a general discussion. It would be better if the discussion is progressive with giving chances to each and every member rather than having a debate.
- **Round 3 - Interview:**
  - ○ It was a panel of 3 members. Main focus was on the resume.
  - ○ I have done QFD in one of the projects and they were asking about QFD in detail, I was able to answer most of their questions regarding it.
  - ○ It was more of an interaction. The technical requirements and specifications of my project were discussed in detail.
  - ○ As they were getting into core mechanical, the panellists started asking about design and engineering drawing aspects, a drawing sheet was shared with me and notations used in the sheet were to be discussed, the kind of manufacturing processes and operations can be performed to manufacture that particular part.
  - ○ Material properties of the part were discussed. Lean Manufacturing basics were discussed in detail. Material Procurement and real life experience regarding the same was asked and I was able to answer that by mentioning my Bachelor's Project and my contribution to it in the same.
  - ○ They tried to push my boundaries in the interview by challenging all the points in my resume and also regarding my Teaching Assistantship work.
- The offer was for an internship and full time job Conversion would be based on performance in the internship

Sources of Preparation
- Focus on your projects mentioned in the resume.
- Lean Manufacturing by Dennis Pascal.
- Focus on GATE notes.

Courses and Certification
MS Excel, Visualisation and Dashboard- Udemy

Other Relevant Information

Focus on the resume and be attentive in the interview as the questions were a bit challenging and don't lose your calm throughout the interview.

Sector: Mechanical

Name: *Mehta Malay Mukeshbhai (2020H1060209P)*
Company: Schlumberger
Profile: Mechanical Engineer

Recruitment Procedure
- Resume Shortlisting, GD, Technical + HR Interview
- Every round was an eliminative round.
- **GD Topic**: Impact of Covid pandemic on Indian economy
- **Technical + HR Interview**: Interview duration was about 45 minutes.
- Questions Asked:

- o Technical Questions:
  - ■ Tell me about yourself
  - ■ Questions based on Resume.
  - ■ Interview was mostly in the direction of B. Tech final year project, Internships and Work experience (if any).
  - ■ Questions based on position of responsibility (if any) Like SAE BAJA, major questions on Designing and analysis of vehicle systems.
  - ■ Questions on basic mechanical subjects like fluid mechanics, thermodynamics, Refrigeration and Air-conditioning & Machine Design (Specifically on Bearings).
- o HR questions:
  - ■ What is Major initiative taken by you in your life?
  - ■ What are the major difficulties faced during team work in BAJA events and how did you manage it?
  - ■ Questions about family members
  - ■ Hobbies

Sources of Preparation

Prepare each and every term written in the resume properly. Revisit all projects and internships. Revise basic subjects of mechanical engineering from GATE class notes.

Courses and Certification

- ● Certifications are not prerequisites.
- ● However, I had certification from Skill-Lync for the course of "Introduction to CFD using MATLAB and OPENFOAM".
- ● I also had a certificate of my paper publication on "CFD Analysis of NACA0012 aerofoil and evaluation of stall condition".

Other Relevant Information

Most R&D job profiles will ask for a strong technical profile. So, prepare all projects in your Masters and Bachelors which are relevant to practical engineering applications and justify the results of projects properly.

Sector: Mechanical.

Name: *Senthil Kumar K (2020H1410151P)*
Company: Schlumberger
Profile: Mechanical Engineer

Recruitment Procedure
- Resume shortlisting, Group Discussion, Technical & HR round.
- The Group Discussion topic was related to Oil and Gas industries.
- Technical questions were mainly related to projects and previous experiences. From my projects questions were related to modelling and simulation and basic questions from mechanical engineering.

- HR questions were basic HR questions like Self Introduction, Strengths, Weakness and some behaviour-based questions.

Sources of Preparation
Revising Strength of material, Material science and Manufacturing Technology topics.

Courses and Certification
- Mechanical engineering courses
- I had 3D modelling certification for mechanical design, however no certificate proficiency was tested.

Other Relevant Information
Interviewer was looking for someone with good technical skills and one who is a team player. So, try to share some team projects and some extracurricular activities that you have done.

Sector: Mechanical.

Name: *Kushagra Luthra*
Company: Whirlpool
Profile: Senior CAE Engineer

Recruitment Procedure
- Online Test:
  - 30 questions for 30 minutes.
  - Simple technical questions of 1 mark containing basic theory or simple numerical questions.
  - Basic questions from core subjects like SOM, TOM, VIBRATION,

THERMAL

- Technical Interview:
    - First, they asked me to introduce myself. In my introduction I mentioned the projects and subjects in which I was most comfortable.
    - As I have designed and fabricated an ATV, so I told them about the project and the subject I was most comfortable with i.e., S.O.M.
    - Interview was mostly on the project that I told them in the introduction, they asked me the difficulties I faced in my project and how I overcame those difficulties.
    - After the project they asked me some basic questions on S.O.M and Mechanics.
- H.R Interview:
    - First question was tell me about yourself.
    - Why do you want to join Whirlpool?
    - General discussion about family members
    - Extracurricular activities
    - Asked me about any corporate experience.
    - Last question was if you want to ask any question.
- Interview Questions:
    - Explain difficulties faced in the project.
    - If we take circular and square cross-section which cross-section will be good for bending?
    - If we drop a ball from a certain height, one of steel and other of rubber, which will touch ground first and why?
    - If we take circular and square cross-section which cross-section will be good for direct shear stress?
    - SFD and BMD of a simply supported beam having uniformly loading condition, where the bending moment will be maximum and derive the bending moment at that point.
    - If a beam has tensile stress at top fiber and compressive stress at bottom fiber, if these both stresses are same then if crack propagation is there then from where the beam crack will propagate initially.

Sources of Preparation

GATE Notes, Project Reports

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Courses and Certification
- Any simulation course will be good.
- A Hands-on Introduction to Engineering Simulations on EDX will be good in consideration

Other Relevant Information
- Just be confident
- Prepare all the projects and tell them one group project in introduction so that they ask questions from that project.
- Must do some simulations and put ANSYS as a learned software in the resume.
- Read Job description carefully and prepare according to that.

Sector: Mechanical

Name: *Kushagra Tiwari (2020H1060222P)*
Company: Whirlpool
Profile: Senior CAE Engineer

Recruitment Procedure
- Resume Shortlisting
- Online Test:
  - 30 questions for 30 minutes
  - Technical Questions of 1 marks containing basic theory and simple numerical questions.
  - Basic questions from subjects like SOM, TOM, Vibration, Materials,

Manufacturing(Casting, Plastic moulding, sheet metal operations).
- Technical Interview:
  - Total 30 minutes interview.
  - First they asked me to introduce myself, subjects that I have studied in first and second semester in ME.
  - They started with FEA, questions like why do we use FEA, what are boundary conditions and why do we need them, what is a cantilever beam, how do you derive the stiffness matrix for a cantilever beam. Basic questions from properties of stiffness matrix.
  - Then they asked about one of my projects from my resume which had basic questions from vibrations like natural frequency, modal analysis, importance and physical significance of doing modal analysis, how to transfer pressure variation loads from ANSYS Fluent to Static Structural, types of loading.
  - Questions from SOM like bending equations and its assumptions, what is section modulus and why do we use it, bending stress distribution in a I-section beam and why does that happen. What is brittle and ductile fracture and which one would you prefer, stress-strain curve of a plastic material, any example of material which undergoes brittle fracture and ductile fracture.
  - Questions from Engineering mechanics like energy balance.
  - Asked about my experience in BAJA and any prior software experience in 3D modeling and FEA, basic knowledge of Python or MATLAB.
- HR Interview:
  - 15 to 20 minutes interview.
  - First HR introduced herself and then asked me to introduce myself from schooling till now.
  - Family background.
  - My internship experience in BHEL.
  - Why Whirlpool?
  - What did you like in Whirlpool apart from ppt?
  - What are your career aspirations?
  - Hobbies.
  - Then I asked few questions about the organization

Sources of Preparation
- Basics of GATE from major subjects like SOM, TOM, FM, MD, Materials, Manufacturing, RAC.

- For written test preparation from previous year ESE theory questions, no need to do calculative questions.
- For an interview, be thorough with your resume and projects. Each and every major and minor questions related to your projects should be very clear.

Other Relevant Information

Mention your prior experience of any software or skillset related to the profile in the resume. Project explanation should be crisp and should be written in bullet points. Certifications related to any software or courses can be a plus point.

Sector: Mechanical.

Name: *Boorgu Karthik (2020H1410165P)*
Company: ZF WABCO
Profile: PGET

Recruitment Procedure
- GD, Online test, Technical Interview, psychometric test, HR interview
- Online test:
    - Test consists of numerical ability and technical questions
    - Test was easy. However, it is important to maintain speed to finish all questions. Going back to previous questions is not allowed.
- Technical interview Questions:
    - Tell us about yourself

      ○ Follow up questions from what you answer based on your resume and projects done.

Sources of Preparation
GATE short notes

Courses and Certification
A Hands on Introduction to Engineering simulations - Edx

Sector: Mechanical

Name: *Dunna Sangeeta (2020H1060207P)*
Company: ZF WABCO
Profile: PGET

Recruitment Procedure
- GD, Online test, Technical Interview, psychometric test, H.R interview
- Online test:
  - Consists of aptitude, reasoning and technical questions
  - It contains basic questions. However, it is important to maintain speed to finish all questions.
- Technical interview Questions:
  - Tell me about yourself
  - Follow up questions from what you answer based on your resume and

projects done.

Sources of Preparation
GATE short notes and online practise tests for numerical ability

Courses and Certification
A Hands-on Introduction to Engineering simulations - Edx

Domain:

PHARMA

Sector: Pharma

Name: *Chandrashekar R Karennanavar (2020H1530367P)*
Company: Biocon Biologics
Profile: Trainee - Formulation Research and Development Unit

Recruitment Procedure
- **Resume Shortlisting and Interview**
- The interview took place for about 20 minutes:
    - A member from the Technical panel asked me to introduce myself.
    - Later he went through my resume and asked the questions related to the projects and courses which I have mentioned in my resume.

- He asked me to brief the procedure for the conductance of the project and also some questions about core pharmaceutical subjects.
- The HR asked me to explain the courses which I have mentioned in my resume relating to the job role. The background information about the company is important as some of the questions were related to the achievements of the company in recent years in the pharmaceutical domain.

Sources of Preparation
- Have some background information about the Company (internet search)
- MS Office courses are a must for documentation purposes.
- It's better to have a thorough knowledge of pharmaceutical subjects.
- For basics, it's best to go through GPAT notes.

Courses and Certification
- Lean Six Sigma Green belt course (Henry Harvin University)
- Excel skills for business essentials- Macquarie University (Coursera)
- Data Management for Clinical Research (Coursera)
- Market Research and Consumer behavior (Coursera)

Other Relevant Information
Fluency is the key to good communication. Try to prepare a script for your detailed introduction and also for some HR-related questions. Be confident while answering the questions and it should be crisp, short, and related to the job role offered by the company.

Sector: Pharma

Name: *Pragnyashree MS (2020H1290007P)*
Company: Biocon biologics, Bengaluru
Profile: Program management department

Recruitment Procedure
- Resume shortlisting & personal Interview
- Questions:
    - Tell me about yourself
    - What are your strengths
    - Knowledge of the role being offered- programme management

       ○ Why do you want to work in the company?

Sources of Preparation

Company website – to look into their vision and also It is necessary to read the Job description beforehand thoroughly to have a clarity on the requirement to the offered role in the company.

Courses and Certification

Not mandatory but, any course knowledge in the managerial aspect alongside life science can prove to be useful.

Other Relevant Information

Apart from technical knowledge, good communication skills and soft skills can have a big impact during the selection process.

Sector: Pharma.

Name: *Shreeya Wagh (2020H1460356P)*
Company: Biocon
Profile: Research Associate

Recruitment Procedure

- Resume Shortlisting
- Personal Interview
- Questions:
  - Tell us about yourself
  - Why did you choose pharmacy?
  - Why R and D?

- What are your strong points and weak points?
- How will you plan your experiment?
- How will you deal with the problems raised during your experimentation?

Sources of Preparation
Company website

Other Relevant Information
You need to be able to convince the recruiter why you wish to join that particular organization and not work in some other sector. Try and give real life examples.

Sector: Pharma

Name: Snigdha Pali (2020H1290006P)
Company: Biocon Biologics India Limited
Profile: Intern - R&D Department

Recruitment Procedure
- Resume shortlisting
- Interview round
- The interview had questions about your background, projects and Lab skills acquired along with some related to the company and its products.

Sources of Preparation
Learning the theoretical and experimental concepts taught in the college with relevant projects and research on the sector of work.

Courses and Certification
The courses covered in the previous semesters and under graduations are relevant.

Other Relevant Information
The profile is skill based so understanding the principles of the various lab techniques is critical.

Sector: Pharma

Name: *Suwetha K R(2020H1290015P)*
Company: Biocon Biologics
Profile: R&D Analyst

Recruitment Procedure
- Resume shortlisting, Interview
- Questions asked based on resume and profile offered
- Tell us about yourself which is not mentioned in resume
- Technical questions based on your previous work that you mentioned on resume

Sources of Preparation

No specific preparations needed; have clear understanding about your previous projects, internships, interests

Sector: Pharma

Name: *Vareeshu Kaushik (2020H1290020P)*
Company: Biocon Biologics
Profile: Manufacturing- Insulin

Recruitment Procedure

- Resume Shortlisting, Technical Interview
- Technical Interview questions:
  - Tell us about yourself
  - Tell us about your internship and how it is related to the profile
  - Follow up questions from what you answer
- Study about the basic principles of all the techniques that are mentioned in your resume.

Sources of Preparation
Study about different upstream and downstream processes that are involved in any bioprocess.

Courses and Certification
A lot of questions were related to different bioprocessing related methodologies so studying those subjects might help during the interview.

Other Relevant Information
Be confident while facing the interview and prepare well on your core subjects as well as techniques and methodologies mentioned in your resume. The interview was a technical one but majorly a stress test.

Sector: Pharma

Name: *Kalpashree N (2020H1460348P)*
Company: Cipla
Profile: Formulator

Recruitment Procedure
- There was a written test followed by an interview.
- **Written test:** It had 2 sections. First was basic English and the second was basic pharmacy questions mostly related to pharmaceutics.
- In the First section there were general English questions and it was very easy.
- The second section consists of questions of core pharmaceutics. The questions were very direct and most of them were from our GPAT syllabus. Going through basics will help to clear this section.
- **Interview:** Both technical and HR rounds were conducted together.
  - In the technical round basics were questioned a lot. Many questions about

my projects were asked. They expect you to tell each and every detail about your project. They test your confidence and also the core pharmaceutics knowledge based on your project and how you deliver the same to them.

○ The HR round was quite tricky because they wanted a person who is determined and can work in a lab. General HR questions like introduction, our strength, weakness, team work etc., were asked. You should convince them that you are ready to work in the lab and also you are ready to work as a formulator.

Sources of Preparation

GPAT questions were asked in both online test and technical round. So going through basic pharmaceutics subjects is enough.

Other Relevant Information

Having a strong knowledge about your project will help you a lot. Every minor detail about your project should be clear.

Sector: Pharma

Name: *Sanghita Ganguly (2020H1460342P)*
Company: Cipla Ltd.
Profile: Formulator- F R&D unit

Recruitment Procedure

● Online Test, Technical and HR Interview
● Test had:
  ○ English Grammar and Composition
  ○ Pharmaceutical Questions
  ○ Questions are basic but time management was important. Going back to the previous section was not allowed.
● Questions in the interview:
  ○ Tell about yourself
  ○ Questions related to the ongoing project and follow up questions

     ○   Subjects studied during the course and follow up questions

Sources of Preparation

GPAT questions for online tests and previous year interview questions.

Courses and Certification

No subject as such. APP, QbD and QARA related questions may be asked, so preparing those are helpful.

Other Relevant Information

The interview process was smooth and company personnel were friendly during the whole process. Follow-up questions are much expected, so do give the answers as such there is no unknown loophole that they can pick up for counter questioning.

Sector: Pharma

Name: *Shalu Mishra (2020H1290004P)*
Company: DataZymes Analytics Pvt. Lmt.
Profile: Associate(Intern)

Recruitment Procedure

- Resume Shortlisting
- Online Test: Qualitative and quantitative aptitude, passage, reasoning
- HR Interview-1: Asked basic math questions
- HR Interview-2: Asked questions based on population aptitude and statistics
- Interview by Director: Asked primary domain based questions

Sources of Preparation

Watched a few videos on how to crack fresher job interviews. Clarity about the projects

worked upon.

Other Relevant Information

Read the job description before going for the interview. Try being crisp and direct but in a polite, forthcoming manner. Try being well-versed about the projects and internships done.

Sector: Pharma

Name: *B. Preethi (2020H1530371P)*
Company: Dr. Reddy's Laboratories
Profile: Technical Trainee - Clinical Research Associate

Recruitment Procedure

- Resume Shortlisting
- **Online test:** The test was for 30 mins. There were 30 multiple choice questions that are subject-related (Pharmacology). The questions were related to core pharmacology basics. The questions were easy and straightforward.
- **Technical Interview:**
  - Time: 20 minutes.
  - First, a member from the technical panel asked me to briefly introduce myself.
  - Then he went through my resume which I already shared with the

company's recruitment team.
- The questions were related to the projects which I have done in my bachelor's and in my master's followed by a few questions related to clinical research and intellectual property rights.
- **HR Interview:**
  - HR asked me to briefly introduce myself, about my hobbies, and regarding the company.
  - HR asked about why you chose clinical research associate as your job role rather than core research and development.

Sources of Preparation
- Have some background information about the Company (internet search)
- Technical skills like MS Word, MS Powerpoint, and MS Excel are important.
- It's better to have a thorough knowledge of clinical research and intellectual property rights.
- To crack the aptitude test, it's good to have thorough knowledge of subjects of the B Pharm basics and core pharmacology.

Courses and Certification
- Lean Six Sigma Green belt course (Henry Harvin University)
- Excel skills for business essentials- Macquarie University (Coursera)
- Data Management for Clinical Research (Coursera)

Other Relevant Information
- Confidence, good communication skills, knowledge about the company.
- It's better to know the role of clinical research associates and their contribution to the scientific world.

Sector: Pharma

Name: *K Ratna Kushitha (2020H1080314P)*
Company: Dr. Reddy's Laboratories (DRL)
Profile: Technical Trainee

Recruitment Procedure
- Resume shortlisting
- Aptitude test: Questions were from Pharma subjects (similar to GPAT)
- Technical Round: For this round a thorough basics of 2 subjects is required i.e. APP and Dosage form design. In addition, one should go through ICH guidelines, QARA topics and also the details mentioned in the resume. The questions can be:
  - Tell me about yourself.
  - About the projects (Both in Bachelors and Masters)
  - Questions related to the details mentioned in CV
  - Basic questions related to Pharmaceutics

- Application based questions in the form of case study
- The difficulty of questions changes from interviewer to interviewer but basics should be very strong to crack the technical round
- HR Round: The following questions can be asked in HR round:
    - Tell me about yourself.
    - Your strength and weakness
    - Where you want to see yourself in next 5 years
    - Follow up questions from what you answer

Sources of Preparation

Revision of GPAT syllabus, Class notes, Internet

Courses and Certification

As it's a core domain so courses related to it would add an advantage.

Other Relevant Information

Whenever the interviewer asks if you have any questions, it's always advised to ask a question because it gives a vibe that you are interested in working in that particular organization. You need to convince the interviewer that why are you looking for that particular job profile

Sector: Pharma

Name: *Pratik Nagaram Chuadhary (2020H1080325P)*
Company: Dr. Reddy's laboratories
Profile: Technical trainee

Recruitment Procedure
- Resume shortlisting, Online test, Technical interview, HR interview
- Test was totally based on the technical field in which you are dealing. Solve GPAT MCQs from Pearson which is enough. Basics from technical knowledge must be clear.
- Technical interview:
    - Tell me about yourself
    - Tell me in brief about your project
    - Some basic technical knowledge question from specialization you are dealing

- HR interview:
    - Tell about yourself and relocation possibility
    - Your hobbies and strength

Sources of Preparation

Youtube for communication skills, Pearson for online test and class notes

Courses and Certification

No particular course required but learn some basic software use in pharma. Learn basics in biostatistics

Other Relevant Information

- Should be aware of each and every thing you have added in your profile
- Do go through the subjects which you add in profile
- Mostly interview was completely based on your profile

Sector: Pharma

Name: *Swapnil Nitin Borgaonkar (2020H1080306P)*
Company: Dr Reddy's Laboratories
Profile: Technical Trainee

Recruitment Procedure

- Resume shortlisting, Online Test, Online Interview
- The test had questions regarding theoretical and practical aspects of pharmaceutical science.
- Application-based study of concepts should be done on the topics related to pharmaceutical processes; like flow properties, basic formulations manufacturing processes, etc.
- Questions:
    - Tell us about yourself.
    - Follow up questions regarding the resume.

- ○ Questions about the project done in the B.Pharm. and research project in masters.
- ○ Questions ranged from very basic terms related to conventional dosage forms to the methodology used in your projects.
- ○ The final question was if I (candidate) wanted to ask the interviewers any questions. This is a very good opportunity to leave the interview with a good impression. You can use the information you have collected about the company or given in pre-placement talks to frame imposing questions.

Sources of Preparation

Pharmacy reference books, Youtube videos. Revision of previously studied concepts is a must for technical interviews.

Courses and Certification

No such course or certification was required. Pharmaceutics related courses and Biostatistics knowledge helped to clear up concepts.

Other Relevant Information

- In these interviews and tests, they check the technical knowledge a candidate has. So it is handy to keep doing the revision of technical concepts.
- Also, prepare the self-introduction properly from your resume. This question sets the tone of the entire interview, as it conveys the confidence and fluency of the candidate.

Sector: Pharma

Name: *Ashmita Biswas (2020H1290019P)*
Company: Eli Lilly
Profile: Global Scientific Communications - Intern

Recruitment Procedure
- First round - Aptitude questions
- Second round -Written test
  - Error checking
  - Essay writing
- Third round - Personal Interview
  - The questions asked were about the projects done as well as on basic knowledge about biotechnology.
  - Personality based questions, scenario based questions were also asked.

Sources of Preparation

Basic biotechnology knowledge and clear ideas about the prior projects done.

Courses and Certification

No subject as such. Interns were asked easy questions from basic biotechnology and regarding the projects done. Preparing these subjects according to the projects could prove useful.

Sector: Pharma

Name: *Sai Anirudh K S (2020H1290012P)*
Company: Eli Lilly
Profile: Scientific Communications Intern

Recruitment Procedure

- **Round 1 Aptitude Test**: Basic English aptitude : Testing Grammar , Spelling and punctuation , Verbal reasoning and critical thinking . i.e what do you infer after reading a given passage.
- **Round 2 Aptitude Test**: Essay writing by choosing one of the given topics, and correcting Errors in a scientific research paper by going through the reference papers in the citations. i.e check whether all data is correct in an article by going through reference papers.
- **Round 3 Aptitude Test**: Interview . questions about Educational background, what you hope to learn in this role, Leadership experience.

Sources of Preparation
Company Website , Youtube videos about attending interviews , Quora .

Courses and Certification
They didn't ask, but a certification in this field can improve your prospects. (Pharma subject certifications)

Other Relevant Information
- Apart from preparing technical subjects for aptitude tests and interviews, it is also important to sharpen communication skills like how you speak as in sentence structuring and Body language. It is possible by regular practice i.e mock interviews.
- Interviews are all about how confident you are and you need to show the interviewer /recruiter that you are keenly interested to learn in the role and get knowledge. It must be made clear to the interviewer that you are very much interested in this role offered by the company and willing to contribute.
- Furthermore, it is completely fine to not know an answer asked by the interviewer. You can always say that you don't know. Interviews are not about answering all the questions correctly. It is about your confidence and willingness to learn new things.

Sector: Pharma

Name: *Samshritha RN (2020H1460353P)*
Company: Indegene
Profile: Associate scientific writing

Recruitment Procedure

- Resume shortlisting, online test, Technical cum HR
- Test had 3 rounds:
    - English grammar: Basic grammar questions to evaluate the knowledge and speed of answering. Shortlisted candidates in this round will further move to the second round.
    - Essay writing: Selecting a topic from a set of topics and completing within the given word limit without plagiarism.
    - Assignment: to write a summary report within the word limit on the given clinical trial data research paper.
- It is all about time management. Grammar round is how quickly and correctly answers are given. Second and third round is to analyse writing skills and interpretation in the given word limit.

- In technical cum HR:
  - Tell us about yourself
  - Follow up questions
  - Questions from resume – Tell us about your project, Certifications.
  - About essay writing and assignment – What is the approach in writing?
  - About the job profile.

Sources of Preparation
Search about scientific writing, several terms, HR questions.

Courses and Certification
Questions from Clinical research, biostatistics. Preparing these subjects would help.

Other Relevant Information
Need to justify why this job profile and how do you fit in this job. Good communication skills are important.

Sector: Pharma

Name: *Kaustubhi Katdare (2020H1460352P)*
Company: Pfizer Healthcare India Pvt. Ltd
Profile: Regulatory Affairs Programme Development (RAPD) Associate in Global regulatory affairs (GRA)

Recruitment Procedure
- Round 1: Group discussion
- Round 2: Technical panel discussion
- Round 3: Interview with GRA HOD
- Questions:
  - Tell me about yourself
  - Brief about projects
  - CTD
  - ICH Guidelines
  - What is regulatory affairs?
  - Difference between QA and RA?
  - Why do you want to go into RA?

        ○   What skills are required for a job in RA?

Sources of Preparation
- ICH guidelines
- QARA
- Company website
- Pre-placement talk

Other Relevant Information
- Be clear on the difference between QA and RA
- Convince the panel on why you want to pursue a career into RA
- Be ready to form answers on the spot as on several occasions they may ask you real-life examples on the skills you mention

Sector: Pharma/Analytics.

Name: *Rekhansh Satyandrakumar Jain (2020H1460361P)*
Company: PharmaAce
Profile: Analyst

Recruitment Procedure
- Resume shortlisting, online test and interview.
- The test was aptitude based with general questions on logical reasoning.
- The interview was taken by a panel of 4 interviewers i.e. 1 HR and 3 technical professionals.
- Questions:
    - Go through your resume.
    - Other technical questions based on resume.

Sources of Preparation
Practice solving aptitude questions in time. Prepare previous years questions.

Sector: Pharma

Name: *Karthik YG (2020H1080318P)*
Company: Syneos Health
Profile: Analyst

Recruitment Procedure
- Resume shortlisting, personal interview
- The personal interview had 2 rounds
- Round 1:
  - Normal communication with one technical person and HR
  - Behavioural questions were asked
  - Scenario-based questions were asked
  - Other basic questions such as tell me about yourself, are you ok with relocating to a new city? Are you ok with traveling? Tell me about some teamwork, etc.
- Round 2:
  - This round was a case interview to test the problem-solving skills of the candidate.

- A case was orally dictated to the candidate and the candidate is expected to solve the case with the logical approach
- Mostly the right kind of approach to solve the case was observed rather than the final solution.

Sources of Preparation
- Placement preparation websites
- YouTube (IIM consulting channel for guesstimates and case interviews)
- Consulting club book by BITS Pilani, Hyderabad campus
- Online resources

Courses and Certification
- Google data analytics professional certification
- Microsoft excels
- Six sigma

Other Relevant Information
- The interview was conducted mainly to understand the communication skills and problem-solving skills of the candidate.
- No questions were asked which was related to the pharmaceutical industry

Sector: Pharma

Name: *Samridhi Johri (2020H1470333P)*
Company: Syneos Health
Profile: Analyst

Recruitment Procedure

- The procedure comprises 3 rounds. Where the first round was resume shortlisting, second round was HR interview and third round was a case study.
- The recruitment doesn't have an online or offline test, so the focus remains on the communication skills majorly. Orating skills should be well garnished.
- In the HR round, questions about self were asked, including the self-introduction, projects and internships mentioned in the resume. Also, they asked about how a certain discipline (ex: chemistry) can contribute to a consultancy firm. Some personal questions like the following were asked too.
    - Who is your role model?
    - How do you start a conversation with someone you don't know?
    - Do you believe in starting the conversation first?

- Have you ever been in a conflict with your close friends or family?
- How did you solve it?
- How do you manage the conceptions people have about you, are they true or false?
- If false, how do you rectify them?
- Any questions that you want to ask? (Don't skip this question, it depicts your interest in the position of the company)
- The third round comprises the case study round, where a situation according to the recent advancement in the pharma sector was given.
  - For instance, a covid related case study was given, where the medication was to be made available in the whole country.
  - A total of 3 to 5 minutes were given to ponder over the business in the market, the drug will be made and an annual revenue generation estimate was asked. Sort of a guess!
  - They basically want to know the process of how you solve the case study rather than an approx. figure or number. The parameters taken in consideration to reach the conclusion must be well described as it projects further cross questioning.
  - In this round too, they ask if any question they have or not and it's quite commendable if one doesn't skip that too!

Sources of Preparation

Major sources for preparations were current affairs and case studies along with guess estimates available online or offline, as per feasibility. Apart from that, whatever courses or projects or internships that have been mentioned in the resume shall be thoroughly revised. A thorough background research of the company and its post.

Courses and Certification

- Hospital and Industrial internship (Certifications)
- Projects done in UG (Certifications)
- Courses about six sigma, MS Excel, PowerPoint, SQL, and
- Basics of pharmaceutical discipline one belongs to.

Other Relevant Information

Communication skills shall be managed efficiently, and for that some courses can be taken. Practice shall be done enough for fluent speaking and listening skills. Communication and attentiveness for the post and company is the key!!

Sector: Pharma

Name: *Unnati Batra (2020H1460343P)*
Company: Syneos Health
Profile: Analyst

Recruitment Procedure

- The selection process consists of three rounds - Resume shortlisting, Personal Interview (Technical and HR), Case-study Interview.
- Test is not a part of selection criteria, and hence the main focus is on resume preparation.
- Resumes should be made in such a way so as to impact the recruiters on how well you are suited for them and the post that is being offered. Do not add unnecessary elements. Instead, add what skills of yours genuinely reflect an advantage to the position being offered.
- After resume shortlisting, the procedure is directed towards a personal interview. Each interview round lasts for 15-20 minutes per candidate.
- For Interview preparation, one must focus on communication skills. Above that,

confidence will act like a garnishing ingredient. This is a must in addition to formal dressing and well-disciplined behavior.

- Questions asked in Personal Interview remain easy, they ask questions on introduction to self, various parts and experiences as mentioned in resume. Simple questions on various subjects and projects taken in the discipline. You need to tell them how all the mentioned subjects you have completed till now will help in working with the company. They also include questions to get an idea on how well you know about the company. Some questions were:
  - What do you know about Syneos Health? Where are our headquarters located?
  - What is the ideal working environment according to you?
  - From all the internships that you have done till now, what according to you is not good at a certain working place?
  - How do you deal with people when they have a wrong perception about you? Cite a real-life situation that you faced.
  - What makes you think that you are appropriate for the position being offered?
  - How will you solve a conflict between two of your office mates? Any examples from previous experience?
  - What do you want to know from us?
- In answering the questions, try to respond in a way that depicts specific points from PPT conducted by the company, which will show your attentiveness
- After selection in the second round, the case study interview round is the next step.
  - This round comprises a case study that is provided to the candidate and is required to be solved. The candidate is given time to solve the query they have generated.
  - The main point they look into is your problem-solving method. Here the correct answer is not the main deciding factor for selection, but the right approach is. The case study can be from recent events in the pharmaceutical industry.

Sources of Preparation
- Go through your resume properly, as the majority of the questions are based on projects, internships, subjects taken as mentioned in the resume.
- Major sources included the subject matter from the courses taken and practice on case studies in the pharmaceutical industry from online sources.

- You can also avail certain online courses, like SQL, data reporting, clinical research, which can additionally be helpful according to the position offered.

Courses and Certification
- Preparation on subjects like Clinical Research, Quality Assurance Regulatory Affairs, Pharmaceutical Biostatistics will be beneficial.
- A good grasp of the basics of the subject matter is beneficial.
- Specific online courses are Microsoft Excel, SQL, Data Reporting, Six Sigma, etc.

Other Relevant Information
Speaking and Listening skills are important grounds of selection criteria. Presentational, management, and organizational skills are specifically looked into.

Sector: Pharma/ Analytics.

Name: *Sanskruti Santosh Kharavtekar (2020H1530363P)*
Company: WNS
Profile: Trainee Analyst, Marketing Analytics

Recruitment Procedure
- Aptitude: This included basic aptitude questions including age-related, time-based questions also basic pharmaceutical industry-based questions
- Cocubes: Basic general knowledge-based questions, was quite easy also included certain grammar based questions
- Personality: Questions about how one would respond in a particular situation
- Interview: Interview was more technical based, questions related to prevalence, incidence of disease, epidemiological knowledge, case studies, guesstimates, current pharma market situations were asked.

Sources of Preparation

Guesstimates practice through various online sources as well as for aptitude based questions referred more from Youtube videos

Other Relevant Information

These kinds of job interviews mainly rely on how you answer a particular question, your perspective matters, compared to what you say. Learn more about recent deals in the pharma market as well as study how to answer guesstimates.

Sector: Pharma

Name: *Urvashi Anwekar (2020H1460358P)*
Company: WNS
Profile: Market Analyst

Recruitment Procedure

- Cocubes Test, Aptitude Test, Virtual Interview
- Aptitude Test had 3 sections:
  - Verbal- based on a short passage, the only type of question was to identify if the given statement can be inferred from the passage or not.
  - Data Interpretation
  - Quant
- For the Cocubse test it was a psychometric test so a normal personality test.
- Test was easy. However, it is important to maintain speed to finish all questions. Last section was not timed. Going back to previous questions is not allowed.
- Questions:
  - Tell us about yourself

- Follow up questions from what you answer
- Guesstimates or case study. For example they can ask you to be CEO of pharmaceutical company and what all things you need to enhance your reach in market
- Be confident while answering case studies

Sources of Preparation
- For aptitude preparation do it from indiabix.com
- For guesstimates search on Youtube

Other Relevant Information
- Most job interviews are FIT based rather than SKILL based. You need to be able to convince the recruiter why you wish to join that particular organization and not work in some other sector.
- Show you are interested in the market and have some knowledge about how the pharma industry works commercially.

Domain:

PRODUCT MANAGEMENT

Sector: Product

Name: *Atharva Somshekhar Modi (2018A4PS0555P)*
Company: Tata AIG
Profile: Product Tower Specialist

Recruitment Procedure
- Stages – Resume shortlisting, Group Discussion, Technical Interview, HR Interview.
- GD round consisted of a case study rather than a random topic.
- Technical round consisted entirely of questions based on Mechanical subjects. Not just on the topics dealt within the student's projects but also others. They also asked a few questions about current industries in the domain
- HR interview was based primarily on two aspects:
  - Asked me about my dip in CG in my third year. Follow up questions dealt with the challenges faced in that regard and how I overcame them. Then they asked me about my interest in core Mechanical and my motivation to

join the company. They asked me to explain about my volunteering activities as well.
- ○ They asked me to solve some situational problems. One was- Say the company is seeking to enter a new domain and you are tasked with attracting new clients. How would you go about it? Then they asked some specific questions about executing some of the measures I mentioned. A few questions about specific interests within the finance/insurance domain and my future plans.

Sources of Preparation
- Past project reports for resume review.
- Notes and GATE prep material for the technical round.
- Some basic casebook reading for the GD

Other Relevant Information
Not much finance knowledge was expected. One was mostly expected to bring decent core subject knowledge as one would be mostly involved in underwriting duties for technical businesses.

Sector: Product

Name: *Himanshu Sharma (2018A4PS0591P)*
Company: Tata AIG
Profile: Product Tower Specialist

Recruitment Procedure
- Resume Shortlisting
- Group Discussion
- Interview, Round 1 – Technical, Round 2 – Technical + HR
- Most of the candidates were selected in the resume shortlisting round.
- Group Discussion was Case Study based and we were expected to arrive at a Solution Statement.
- Interview, Round 1- Questions were purely based on the projects and internships. Also, follow up questions were there from the project based on the core CDCs knowledge.

- Interview, Round 2 – Again, questions were based on projects and internships. Some case/situation-based questions and generic HR questions.

Sources of Preparation
- Mock Group discussions with friends and mock interview by PU
- Revision of CDCs and Electives class notes
- Reports of Projects and Internships (detailed knowledge of every project required which is there on resume)
- HR questions preparation from YouTube Videos

Other Relevant Information
Interviews were purely technical and based on your core knowledge. Be prepared with the basics of CDCs and everything which is there on the resume.

Sector: Product Management

Name: *Neetika Khosla (2017B2A20679P)*
Company: Tata AIG
Profile: Product Tower Specialist

Recruitment Procedure
- Resume Shortlisting, Group Discussion, 2 rounds of interview
- Group Discussion:
    - We were divided into groups of 8, given a typical case of increasing engagement
    - About half the people were selected for the next round
    - The key was to get a proper solution to the problem statement given
- The first round of interview was around 10-15 minutes long to judge you overall as a candidate
    - Brief Introduction

- - Resume-based questions about your past intern/projects
    - They went on the technical side of your major, so be prepared for that
  - The second round was a mix of technical and HR questions
    - They want to judge your problem solving abilities here, and want to ascertain if you'll be a good fit for the company
    - Couple of questions related to the company itself, their work, situation based questions
    - Standard HR questions as well as picking a random section from your resume and grilling you about it

Sources of Preparation

- Be familiar with the process of case solving (Case Interviews Cracked).
- For the interview, no specific source, you need to be able to think on your feet, be thorough with your resume and need to know technical details of your internship and projects.
- Also read about the company in advance and the job profile beforehand.

Courses and Certification

Be thorough with your core branch subjects and what you achieved in your projects.

Other Relevant Information

You have to convince the recruiter that you are interested in the role that you are applying to, and how you are the perfect fit for them. Quick thinking and adaptability is the key here.

Sector: Product/ Business Development

Name: *Shikhar Vohra (2018A3PS0411P)*
Company: Tata AIG
Profile: Product Tower Specialist

Recruitment Procedure

- The recruitment process involved 4 stages, with each stage being a direct elimination round.
- Stage 1 - Resume Shortlisting. A total of 45-50 students were selected for this round. The criteria was not known, but most likely everyone who applied went called for the next round.
- Stage 2 - Group Discussion. Groups of 8-10 students were made with. The hiring person gave us a topic and we were supposed to discuss and come up with a solution AS A GROUP. It is important to focus on the goals that we had to achieve

as part of the topic/case study given, and not deviate from it. 22 Students were left after this round.

- Stage 3 - Technical Interview. So this interview depends on your branch. My interview was taken by an electrical engineer with another mechanical engineer for cross questioning. It was mainly a Power Systems course, the reason for that being I had done my PS-1 in Jaguar Overseas Ltd, which works in this domain. They are mainly looking for your basic understanding, nothing in too much detail. 12 Students were left after this round.
- Stage 4 - HR Interview. A very standard HR interview with mainly discussion on my POR of Inspired Karters.

Sources of Preparation

Actually, if you have a very basic understanding of your core discipline courses, it should work fine. Just make sure you try to keep everything significant that you have done in your college life, in your mind during that interview to answer the questions within the time.

Courses and Certification

CDCs. No certi's needed.

Other Relevant Information

Seemed more like a personality judging interview than technical/domain based. Being yourself here should fit the bill well, but having said that, I don't know what worked for me, so take all this with a grain of salt.

All the very Best.

Sector: Product

Name: *Srijen Jagdish Gupta (2018ABPS0755P)*
Company: Tata AIG
Profile: Product Specialist

Recruitment Procedure

- Resume Shortlisting:
  - Always understand the JD given by the company and try to highlight relevant courses, projects etc. Here it was more of a diverse profile with complete understanding of supply chain and focused on application of data analytics in real life problems.
  - Try to maintain an equal number of internships and relevant projects to make it look more presentable.
- Group Discussion:

- Nearly 30 min was given to each group to discuss on a given topic.
- Topic was more case-based, "You are part of the Cultural Committee and the fest is going to be held in 4 days. A major sponsor for the fest, who was going to contribute nearly 40% of your budget, has pulled off due to company issues. How would you manage the situation?"
- 50% were selected for Technical Interview
- Technical Interview
  - First question was to introduce, knowing interest and branch in general.
  - They asked about projects in detail, making sure you know the points you've mentioned in your resume.
  - Then they asked a few questions on past internships, work done there and other technical questions related to terms mentioned.
  - Lastly, they asked some questions which were more focused on problems that a Manufacturing Firm/Factory might face during production.
  - Concepts like Lean manufacturing, Operations management, Six Sigma, Downtime, Kaizen, Just-In-Time production could become handy.
- HR Interview:
  - It began with a generic question about the Manufacturing branch, what all you have studied in 4 years? How is it different from Mechanical, Civil & Chemical?
  - They asked me to brief about my work in my past internship in SKF India Pvt Ltd. in simpler terms. They tried to build pressure by commenting that work was simple, anyone could do it, to which I replied with a smile that it seems simple but there are a lot of technical aspects to cover which makes it difficult.
  - They asked me if they asked my manager at internship to give feedback about my work then what it would be to which I replied with confidence that the manager was impressed by the outcome of my work in the allotted time frame.
  - Just to check they asked my name of managers and their designation. They also asked me about shortcoming of my project and very specifically, "What would be the professional advice that your manager would give you?"
  - They asked me about my Data Analysis project, how I arrived at parameters and how it is accurately predicting the sales. Knowledge about some basic regression models was enough.
  - Then they asked me about my family and my residence and eventually concluded.

Sources of Preparation

GD topics from Indiabix.com, PS chronicles, Manu CDC's and General interview questions from Google.

Courses and Certification

- Not very necessary but courses like Supply Chain Management, Lean Manufacturing, Operations Management can give you an edge in terms of real life working in industries.
- Courses like Applied Statistical Methods might help for analytics questions.
- If possible try to have one project which shows your knowledge in analytics using QL/Python

Other Relevant Information

- For resume- Proofread it at least twice before finalizing, highlight all the important words/terms, get it checked with seniors/batchies. Make sure you know each and everything of your resume very well.
- For GD- Always be properly dressed, it gives a positive impression to the moderator. Don't argue on any of the points, be polite and listen to others and put your opinion firmly. Don't try to cut other's points in between. If possible try to introduce or conclude to gain extra points.
- For Technical Interview- Be thorough with all the technical aspects of internships/projects mentioned in the resume. Try to show how you have made a difference using your knowledge. Know about your branch courses especially, courses which dealt with direct application in your projects/intern.
- For HR Interview- Don't lose temper as they might try to pressurize you with

questions. Be confident and keep a smile while answering questions.