Candidate Name: Sumit S. Chaure

Batch: Feb 2020

Company Name: Morning Star

Profile: Associate Software Engineer

Pre-placement talk (12/02/2021 10:30am)

Round 1(12/02/2021 11:30am):

Apti-Quants & Techincal Test On Cocubes

(Basic Aptitude on number system, percentage, profit loss discount, age, time work, probability, etc.

passage question, reasoning basic questions.

Technical section included snippets, error identification, basic dbt query, etc.)

Round 2 (Technical Interview L1-Interview, 15/02/2021, 10:00-10:45 am)

- 1. Tell me about yourself.
- 2. What was your project(CDAC Project)?
- 3. Give some case of working.

(like example of the project in real life or website eg in my case I gave examples of amazon,flipkart,Alibaba,ebay,myntra,bewakoof,shopify stores and explained a few difference of these sites like retail based, consumer oriented,wholesale trader,company based,etc)

- 4. Elaborate it.
 - (Explain the CDAC project ,its workflow, various options & or operations successfully implemented on the project work.)
- 5. What did u do to make the website work?
 - (details about technologies and framework implemented ie Angular on Front end, Java springboot on the backend backed by MySQL for database implementation and few api/cdn used in prj.)
- 6. What was your contribution to the project?
 - (Brief explanation on what I did on the technical front implementation.)
- 7. What was the project actually about[as in presenting to a client what the product was in this case a website say like a short verbal SR/BRD of the project]
 - (B2C website/webapp short description using a real-life website eg to give clear idea about the project.)
- 8. Which front did u majorly contribute?
 - (Front Or Back end one word answer no explanation or elaboration)
- 9. How did you manage the database in your project.
 - (Simple short database flow no table explanation just basic)
- 10. How did u achieve the front and backend integration?
- 11. OOPS Concepts.
 - (Definition in your language no concrete definition pls with separate examples for each pillars)
- 12. Did You Do hardcoded queries in your database.
 - (Yes/no with reason)
- 13. What was not manageable in your project or what was not fully incorporated/implemented in your project.
- 14. Oops concepts 1 example reflecting every oops concept in one example.

- 15. Give a technical demo/example of Polymorphism.
- 16. Suppose if there is a protected method inside a class say as in your eg of class car and can we make a call to call these protected method ,is it possible.
- 17. What did you do in angular front.
 - (brief about the components, services, validations I did on the angular front)
- 18. Asked about the services u wrote and explain them in brief what they did and what was the logic in them.
- 19. How did u achieve data integration part?
- 20. What are the basics in Angular?
 - (said about modules, directives, services, components, pipes, templates etc)
- 21. Why only angular?
 - (why not react js or vue or something other on the front end
 - Explained a few features why angular is good choice for website design)
- 22. Why do u think angular is better than traditional asp net or html webpages.
 - (same gave features of angular and few drawbacks of traditional technologies.)
- 23. Can u give example of angular or dynamic sites
 - (gave example of Instagram, facebook app, youtube, reditt and few other and explained what dynamic websites, single page apps are and different from traditional webpages)
- 24. Was their any joins in Database?
- 25. What is that loading called where data does not load immediately rather waits for interactions like click or scroll or orientation etc?
- 26. How did you fill up data in multiple?
 - (Didn't get the question maybe it was data from or to database and front end)
- 27. Validations on Login logout registration & other forms. Explain the logic not the service completely. (Just said about the minimum length check email id validations, date check, mandatory fields check, some restricted words check say admin as username, invalid entry checks etc. on the front end only though)
- 28. You said there is a Reactive form on cart/order page and registration one which validations did you implement their.
- 29. Explain the process after Submission in short.
 - (the process after order is placed we had token number generation, dipaly invoice, a thank you popup, redirect to homepage after clicking ok)
- 30. One question traversal in Linked list.
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- 32. Explain what is stack, its implementation, real life example.
- 33. Suppose there is a list which has duplicate values how will ypu find a particular said value from these list(traversal logic and complexity based explanation)
- 34. What was your BE project about.
 - (No explanation just brief as it was a mechanical one so just the summary)
- 35. Gave A logical problem and asked its logic roughly how the prg would give the said result.
- 36. Basic Swap 2 variables prg logic part.
 - (Gave the basic temp variable one)
- 37. Without using temp variable can u swap 2 numbers.
 - (Said about bit-wise operator & Arithmetic one)
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Technical Part

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- 16. Due to pandemic how did you keep touch with everyone for collobrations and doubt resolution. (github and notion for collaboration, zoom and MS teams for meetings/screen sharing code reviews, google drive for sharing files along with telegram for discussion & keeping updates)
- 17. 1 logical puzzle
 - Say there is a 100 floor building and u have cheap phones (infinite quantity).we have to check from which floor would the phone start breaking.
 - (checking for iteration logic and how reasonable the answer was finally answered that it may or may not be actually be possible to estimate the correct floor just we can reduce the iterations to minimum no of floors but not in a go can we determine which floor it will be.

Few HR type Questions

1.If you were given 2 offers 1 paying more than the other company which would u opt?

- 2.If in future you get a job in government sector would u consider.
- 3. Say the offer is related to IT, cloud computing and is government would be your choice,
- 4.Say we choose you in our company & settle u in some department and few years after you get an offering from outside for cloud computing aws stuff which u are interested in would u give up on the offer and continue in the prj/department u r assigned here.

Round 4 (HR Interview L3-Interview, 16/02/2021) – Didn't Receive a call.Rejected For HR Interview.

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Round 4 (HR Interview L3-Interview, 16/02/2021) – Didn't Receive a call.Rejected For HR Interview.

Morning star interview Question_Ravi Verma

Level 1: Technical

- 1. Introduce yourself
- 2. Explain your project
- 3. What how you've used all the OOPs principles in your project?
- 4. What is polymorphism?
- 5. What is abstraction and encapsulation?
- 6. Difference between an abstract and an interface.
- 7. Various scenarios related to default methods were asked (What it I have 2 interfaces and both the default methods in these interfaces have same names and a class just implements these interfaces- will the program run? Now if we create the object of my class and call the default method on that object (without overriding the method in my class) will the program compile? What if I want to call the default method of any 1 of the interfaces in my class, what code should I write)?
- 8. Write a program to count all the occurrence of all the words in a paragraph.
- 9. Which amongst the String and StringBuilder is preferred if you want to append a substring inside each iteration of the loop and create a statement?
- 10. Explain stack data structure
- 11. Which data structure will you use to display a statement in a reverse order eg. My name is Ravi Verma, the output should be Verma Ravi is name My?
- 12. Can you explain me how linear search algorithm works?
- 13. Can you explain me the scenario where I using Binary search will be most efficient?
- 14. Explain all the DDL, DML commands in MySql
- 15. Truncate Vs Delete
- 16. In what format was the sensitive information like password was saved in your project? How will you make sure that the sensitive information goes inside the database in encrypted format?
- 17. What is Hibernate?
- 18. How does the dataflow happens between the middle tier and the backend?
- 19. Are you aware of HTML and CSS?

- 20. Can you explain the usage of JavaScript?
- 21. Explain how will you validate a form using JavaScript

Level 2: Technical + Managerial

- 1. Introduce yourself that includes everything like where you live, where have you completed your education, hobbies, etc
- 2. Walk me through your CDAC project and what re have you played
- 3. What is abstraction and encapsulation?
- 4. What is Dependency Injection?
- 5. Explain me the architectural decisions in your project and explain each of them in detail.
- 6. What if you have your project in production and your website fails after some period of time at the time 1000's of users try to register at your project. How will you deal with the situation?
- 7. What is Normalisation?
- 8. Explain all the DDL, DML, DCL and TCL commands in MySql
- 9. What will be your responsibility if you're the Team Leader of a particular project?
- 10. What is waterfall model?
- 11. What is Agile model?
- 12. What is scrum and various roles in scrum?
- 13. Enlist various testing tools that you can use in your project.
- 14. Enlist various deployment tools
- 15. How will you ensure that your website is secure?
- 16. How did you get to know about Morning Star?
- 17. Why do you want to join Morning Star?
- 18. How were you guided by your mentor related to carrier aspect(since he works at Morning star)?
- 19. How do you keep yourself updated with the latest technologies and advancements in IT?

- 1. Walk me through your resume
- 2. How was your experience in the entire recruitment process?
- 3. Explain your project?
- 4. How did you get to know about Morning Star?
- 5. Why do you want to join Morning Star?
- 6. Are you comfortable travelling from your home to office everyday?

Aafrin Ansari

Morningstar

Dt: 15th,16th Feb'21

ROUND1: Technical

- 1. Introduce yourself.
- 2. Tell me about the projects you have done. [B.E. + CDAC]
- 3. Explain your B.E. project in detail.
- 4. What was your role in the project?
- 5. Which lanaguages are you comfortable in?
- 6. Database used in the project

- 7. What is OOPS?
- 8. How is OOPs different from from functional based programming.
- 9. What is object?
- 10. What is class?
- 11. What do you mean by encapsulation?
- 12. Method overloading and overriding
- 13. How would you provide copy constructor? [JAVA]
- 14. What is exception? How will you handle it?
- 15. Explain finally block.
- 16. What is automatic garbage collection?

- 17. What is data structure?
- 18. Explain linked list.18. Give some applications of data structures.
- 19. Doubly linked list.

Pseudo codes for below questions

20.

Array A- some numbersthe given example conveyed it was sorted.

Array B- some random numbers.

Algorithm to check which element of A is not present in B

21.

Array with unsorted numbers

Find the 2nd highest number.

22.

string = something..

How to find the occurence of a given character..suppose 'a'

- 23. What is MySQL?
- 24. State some features of MySQL
- 25. Database vs Table
- 26. Alter commands

change table name

change column name

remove a column from the table

27. Truncate vs Delete. For what reason is truncate preferred?

- 28. Explain MVC architecture.
- 29. What is Servlet?

30. What is ORM and state some advantages of it.

- 31. What is service in Angular?
- 32. What is component?
- 33. What does a component contain?
- 34. Explain routing.
- 35. What is package.json file? Where is it located?
- 36. ngIf directive
- 37. What is Dependency Injection?

ROUND2: Tech-Managerial

- 1. Tell me what technology are you aware of so that I can set the tone for the interview?
- 2. As you mentioned you're from non-IT background, why are you interested in IT?
- 3. What was your project in CDAC? What was your role in it?
- 4. What is immutable class?
- 5. Give other examples of immutable class. Also tell me how to make a class immutable in java?
- 6. What is static in java?
- 7. Difference between final and finally. Can we use finally without try-catch?
- 8. What is Class.forName?
- 9. Explain public static void main(String[] args)
- 10. JDBC Connection string
- 11. What is Prepared statement?
- 12. What is Statement in jdbc?

13. How much do you know about MySQL?

14. How does Mysql maintain consistency? ----- (aCid property!)

- 15. What version of Angular did you use?
- 16. Web service consumed in the project?
- 17. Angular components

- 18. What did you use to version control your project? Explain how did you manage it.
- 19. Git clone, add, commit, push, checkout

ROUND3: HR

- 1. Guide me through your profile.
- 2. Did you know about Morningstar before?
- 3. What expectations do you have from our company?
- 4. What were you thinking when you applied for this job? Why did you apply?
- 5. Tell me about your CDAC project in a way you'd explain it to a person with non technical background. How many team members did you have?
- 6. What did you learn while working on your project?
- 7. Do you have any inclination towards any technology?
- 8. What did you feel about your interviewers from Morningstar so far?
- 9. Questions about relocation, willing to join asap or not, family etc.

Morningstar Interview Questions – Akash Dhawale (Feb 2020 Batch)

Technical L-1

- 1. Introduction
- 2. Tell us about your CDAC project.
- 3. Explain all technicalities in your project.
- 4. How much would you rate yourself in frontend, middle tier and backend out of 5?
- 5. How your login page of project works?

- 6. How you are not letting user to access other pages like product page when user is not logged in into application? Answer Guards
- 7. What do you mean by Guards?
- 8. Types of guards.
- 9. What is component in Angular?
- 10. Types of directives.
- 11. Which directives have you used in your project?
- 12. What are structural directives?
- 13. Explain Angular hooks?
- 14. What is difference between Ng-OnInit and Constructor in Angular?
- 15. How to transfer data from one component to another component?
- 16. What are the data types in JavaScript?
- 17. What is DOM?
- 18. How to get information of CSS classes used in particular HTML tag whose ID name is known?
- 19. How to add CSS classes at runtime?
- 20. If I have array let say 10,20,30,40 at index 0,1,2,3 and I want to print that data in reverse order without changing there indexes and without using loop. So tell me a predefined method for array in JavaScript which will do this task. Answer pop()
- 21. What Is JQuery? Enlist any Method of JQuery?
- 22. Write a method SumRange() which will accept number as argument let say 5 and will print sum of 5+4+3+2+1 I.e. 15 without using any loop.
- 23. What is string in Java?
- 24. What is immutability in Java?
- 25. Let say I have

```
String str1 ="akash";
String str2="akash";
str2="dipak";
```

What will happen in this particular set of code?

- 26. What is Concurrent HashMap?
- 27. How many locks we have in Concurrent HashMap?
- 28. What is Lock interface? And What is Reenterant lock?
- 29. Types of joins in Database.
- 30. Asked me to write 2 different MySQL queries from a given table.
- 31. Some basic questions of Java and DB.

MANAGERIAL ROUND

- 1. Introduction
- 2. Walk me through your CDAC project and your role in project.
- 3. What happens when user hits a particular URL in your project?
- 4. What is Servlet?

- 5. How you keep yourself updated with new technologies in IT?
- 6. Which is recent version of Java?
- 7. Any specific enhancement you liked in Java 16 updates?
- 8. Why do you want to join Morningstar?
- 9. Are you willing to relocate to Mumbai?

HR Round

- 1. Walk me through your resume?
- 2. How was your experience in our recruitment process?
- 3. Explain business idea of your project (Non -Technical).
- 4. When do you came to know about Morningstar?
- 5. Why do you want to join Morningstar?
- 6. Are you willing to relocate to Mumbai?
- 7. Are you comfortable with work from home?

Bharatsingh Rathore (morning Star)

Morningstar

.NET Questions

- 1. Tell me about yourself
- 2. Project tech stack
- 3. What is .net framework
- 4. What is msil, clr,cts
- 5. Flow of .net file/how code compiles
- 6. Exception used in project
- 7. What is entity framework
- 8. Design methodology for db used
- 9. Can we have 2 web.config file
- 10. What is global.asax used for
- 11. What is caching

- 12. Managed vs unmanaged code
- 13. Have u hosted your project using its server?

DSA Questions

- 1. Greedy vs dynamic
- 2. What algo will u use for solving longest common subsequence problem
- 3. How will u use dynamic for above question
- 4. Print duplicates from string/array without Collections
- 5. Fibonacci using recursion

SQL Question

Generalised query for Nth highest value which works in all DB(i.e without using rownum,limit offset)

Pravin Jagdale

Round 1

- 1 tell us about your latest project you worked on?
- 2 whats your role in your project
- 3 explain how did you achieved OOPS concepts in your project
- 4 how will you create REST service
- 5 what is dependancy injection and how it actually works
- 6 suppose I have one interface and it has more implementations in Controller class you have instance variable as interface as it has many implementations I want to pass particular implementation

how will you do using dependancy injection

- 7 in what format data traverse from angular to REST
- 8 which methods are used to send data from angular to REST
- 9 differnces between get put post delete methods in angular and how they work
- 10 how did u integrated angular with spring boot

```
11 String s1 = "morningstar"
   String s2=null;
   SOP(s1.concat(s2)) //what will be output over here
12 class a
    {
     public void show()
      cw("1");
    }
    class b : a
    public new void show()
      cw("2");
    }
    class c
      {
     psvm()
     {
       b ob2 = new b();
                         //o/p?? and why
       ob2.show();
      a ob1 = new b();
      ob1.show(); //o/p?? and why
     }
       }
```

```
13 class a
    {
      a()
      {
       sop("from a")
       }
    }
    class b: a
    {
      b()
       sop("from b")
       }
    }
    class c
    {
      psvm()
        b ob = new b(); //o/p?? explain why??
    }
14 table1 table2
   id
                id
    1
                1
    1
                1
    1
                1
```

apply left join, right join, inner join

101010

16 I want to find particular element present in an array give the approach to find it

17 can we have multiple catch blocks? if not why and if yes explain how?

18 can a try block contain finally block?

19 questions on automatic garbage collection (how java does garbage collection and related questions)

ROUND 2

- 1 difference between class and interface
- 2 real life example for method overloading
- 3 what is covarient return type and what will happen if we make overridden method as of type child
- 4 explain and implement calculator (suggestion:- apply all oops concept here)
- 5 what are directives and their types
- 6 what is ngModel
- 7 write a query for stored procedure

8 what are triggers and write one trigger

Aditya Trivedi

- -->Introduce YouSelf.
- -->Tell ME About Your project
- -->Descripe Entire Flow OF Project
- --> Explain All Spring Boot Annotations
- -->Write Code OF Your Model/Pojo Classes OF your Spring Boot PRoject.
- -->Write Code Of Any one Request Handler Method OF Your Project(Login, registrations or Bookings)
- -->What is Hibernate
- --> Why Jpa over HIbernate
- -->Why Spring
- -->What You Write In Apllication Properties Inside Your Spring Boot Project.
- -->What IS Component, Service In Angular.
- -->How To Share Data Between Two Components
- -->Explain Angular LifeCycle Hooks
- -->Can You Consider Your Angular Project As MVC(Ans Is Yes, You Can)
- -->What You DId To Provide Safety & Security IN Your Project
- -->What Do You Mean By Responsive Website, And How to Achieve it.
- -->Issues You Faced In Your Project.
- -->Why Type Script Over Angular

- -->Explain Observables.(Explain Entire Flow).
- -->What IS OOPS
- -->Oops 4 pillers With Example
- -->Abstraction and Encapsulation with example (code).
- --> Diffrence Between Abstraction and Encapsulation .
- -->Collection Api In Java.
- -->Exception HAndling
- -->Stack code
- -->Linked LIst Code.
- -->Stack vs Linked List.
- -->Bubble sort Code.
- -->Fastest Sorting Algo.
- -->Explain Quick Sort.
- -->Joins
- -->Triggers
- -->Where Could you Use TRiggers in Your PRoject
- -->What is Software Dev Waterfall MOdel
- -->What is Agile
- -->What Software Dev MEthodology You used in your Project(Watterfall or Agile)?
- --> What Do You KNow About Deployment Of Websites.
- -->Difference Between TRiggers And Stored PRocedures
- -->what are Indexes
- -->Clustered And Non-Clustered Indexes
- -->Joins(They Give you difrrent o/p cases And asks Us which Join would Help us Achieve that perticular o/p)
- -->what is Normalization and explain it forms
- -->Four people come to a river in the night. There is a narrow bridge, but it can only hold two people at a time. They have one torch and, because it's night, the torch has to be used when crossing the bridge. Person A can cross the bridge in 1 minute, B in 2 minutes, C in 5

minutes, and D in 8 minutes. When two people cross the bridge together, they must move at the slower person's pace. The question is, can they all get across the bridge if the torch lasts only 15 minutes?

-->You have two ropes coated in an oil to help them burn. Each rope will take exactly 1 hour to burn all the way through. However, the ropes do not burn at constant rates—there are spots where they burn a little faster and spots where they burn a little slower, but it always takes 1 hour to finish the job.

With a lighter to ignite the ropes, how can you measure exactly 45 minutes?

Shubham Palay

Round 1:

- Introduce yourself.
- Explain your DAC project. Technologies used in your project.
- How did you manage Registration and Login in your project.
- @GetMapping and @PostMapping.
- Why Angular? Explain routing in Angular.
- What are Observables.
- Explain OOPS concepts w.r.t. your project implementation.
- Interface vs Abstraction. When to use what.
- What is normalization in database? What is the need of normalization? Explain anomalies that come with non-normalized tables.
- Normalization types.
- Explain joins. Types of joins.
- What is Inner Join? What is Right Outer join? Give an example using tables.
- Explain working of any of the sorting algorithms.
- Quick Sort vs Merge Sort.

Round 2:

- Explain your DAC project architecture. What was your role in the project.
- Explain REST. Why did you use RESTful over normal servlet technology in your project.
- Explain your B.E. project. What was your role in the project. In-depth working of project, libraries used and algorithm used (Since it was an ML project).
- If I write multiple main methods in my class, will the program compile. If yes, why? If no, why?
- How does System.out.println work?
- I am selling you a pen for 100Rs and making a profit of 20%. At what price did I buy the pen.(He just needed the approach and not calculations)
- What is the probability that 1st of January falls on a Monday.
- How would you cut a cake in 5 equal pieces without lifting the knife.
- What is Big O notation. What is complexity in algorithms. Which is the best complexity you have come across. Which algorithm?
- What is a linked list. Explain structure of a linked list. Traversal, Insertion on a linked list.
- Explain doubly linked list.

Round 3:

- Introduce yourself.
- Give me an explanation/overview of your project considering I am a layman.
- Tell me about your career so far. (As I had mentioned I had an experience of a year).
- What were your contributions towards your team in DAC.
- Any specific preference/inclination towards a particular technology.
- What would be your short term and long term goals.
- Would you be able to join us immediately.

Sumit Chaure

Candidate Name: Sumit S. Chaure

Batch: Feb 2020

Company Name: Morning Star

Profile: Associate Software Engineer

Pre-placement talk (12/02/2021 10:30am)

Round 1(12/02/2021 11:30am):

Apti-Quants & Techincal Test On Cocubes

(Basic Aptitude on number system, percentage, profit loss discount, age, time work, probability, etc.

passage question, reasoning basic questions.

Technical section included snippets, error identification, basic dbt query, etc.)

Round 2 (Technical Interview L1-Interview, 15/02/2021, 10:00-10:45 am)

- 1. Tell me about yourself.
- 2. What was your project(CDAC Project)?
- 3. Give some case of working.

(like example of the project in real life or website eg in my case I gave examples of amazon,flipkart,Alibaba,ebay,myntra,bewakoof,shopify stores and explained a few difference of these sites like retail based, consumer oriented,wholesale trader,company based,etc)

4. Elaborate it.

(Explain the CDAC project ,its workflow, various options & or operations successfully implemented on the project work.)

5. What did u do to make the website work?

(details about technologies and framework implemented ie Angular on Front end, Java springboot on the backend backed by MySQL for database implementation and few api/cdn used in prj.)

6. What was your contribution to the project?

(Brief explanation on what I did on the technical front implementation.)

7. What was the project actually about[as in presenting to a client what the product was in this case a website say like a short verbal SR/BRD of the project]

(B2C website/webapp short description using a real-life website eg to give clear idea about the project.)

8. Which front did u majorly contribute?

(Front Or Back end one word answer no explanation or elaboration)

9. How did you manage the database in your project.

(Simple short database flow no table explanation just basic)

- 10. How did u achieve the front and backend integration?
- 11. OOPS Concepts.

(Definition in your language no concrete definition pls with separate examples for each pillars)

12. Did You Do hardcoded queries in your database.

(Yes/no with reason)

- 13. What was not manageable in your project or what was not fully incorporated/implemented in your project.
- 14. Oops concepts 1 example reflecting every oops concept in one example.
- 15. Give a technical demo/example of Polymorphism.
- 16. Suppose if there is a protected method inside a class say as in your eg of class car and can we make a call to call these protected method, is it possible.
- 17. What did you do in angular front.
 - (brief about the components, services, validations I did on the angular front)
- 18. Asked about the services u wrote and explain them in brief what they did and what was the logic in them.
- 19. How did u achieve data integration part?
- 20. What are the basics in Angular?

(said about modules, directives, services, components, pipes, templates etc)

21. Why only angular?

(why not react js or vue or something other on the front end

Explained a few features why angular is good choice for website design)

22. Why do u think angular is better than traditional asp net or html webpages.

(same gave features of angular and few drawbacks of traditional technologies.)

23. Can u give example of angular or dynamic sites

(gave example of Instagram, facebook app, youtube, reditt and few other and explained what dynamic websites, single page apps are and different from traditional webpages)

- 24. Was their any joins in Database?
- 25. What is that loading called where data does not load immediately rather waits for interactions like click or scroll or orientation etc?
- 26. How did you fill up data in multiple?

(Didn't get the question maybe it was data from or to database and front end)

- 27. Validations on Login logout registration & other forms. Explain the logic not the service completely. (Just said about the minimum length check email id validations, date check, mandatory fields check, some restricted words check say admin as username, invalid entry checks etc. on the front end only though)
- 28. You said there is a Reactive form on cart/order page and registration one which validations did you implement their.
- 29. Explain the process after Submission in short.

(the process after order is placed we had token number generation, dipaly invoice, a thank you popup, redirect to homepage after clicking ok)

- 30. One question traversal in Linked list.
- 31. Few Questions On DS basic like what is stack, queue, LL and eg real life, also which one would be preferred for an example the interviewer asked.
- 32. Explain what is stack, its implementation, real life example.
- 33. Suppose there is a list which has duplicate values how will ypu find a particular said value from these list(traversal logic and complexity based explanation)
- 34. What was your BE project about.

(No explanation just brief as it was a mechanical one so just the summary)

- 35. Gave A logical problem and asked its logic roughly how the prg would give the said result.
- 36. Basic Swap 2 variables prg logic part.

(Gave the basic temp variable one)

37. Without using temp variable can u swap 2 numbers.

(Said about bit-wise operator & Arithmetic one)

- 38. Are there any more ways to swap 2 variables.
- 39. 1 more logic based prg on DS cum c program
- 40. 2 Scenario based questions on project if user visits the site and this happens how would the site respond or what happens after the said situation

(Forgot the scenario but were basic user interaction with the website.

- 41. End Question Where do u see yourself in 5 years?
- 42. Why Shifted to IT from mechanical?

- 1. How Was You Day & How did you interview go?
- 2. Tried Relaxing me by asking about the overall interview experience by rating it for a fresher 1st interview.
- 3. Introduce Yourself.
- 4. So you're from mechanical why did you opt for cdac and basical towards IT sector.
- 5. How was your CDAC journey what new things did u learn in these past months also how did you cope up with lockdown,pandemic,new studies & pressure?

Technical Part

- 1. Explain your project in short no technical approach just layman layout of ur project view.
- 2. Basic DS questions on stack, queue, LL and example identification which DS would fit the best for this eg.
- Did u apply any DS concepts in your project.
 (said about sorting of products and for search used some algorithms concepts,list,array and few other DS concept used in prj).
- 4. DBT 2 basic query on employee salary db.
- 5. DB concepts used in the project like event, joins, triggers any SP, query, etc.
- 6. Why not use html as in angular u have to design css and html anywyas why do more coding. (angular benefits over html).
- 7. Few basic questions on node and angular like what is a service,ng commands,why use node for angular.
- 8. How the data gets passed from front to back or vice versa. (data integration between java nd angular with DB).
- 9. Questions On Core Java from threads, exception basics, oops concept.
- 10. From advanced java only project related questions like why spring boot for ur project.
- 11. What is hibernate and its use.
- 12. Springboot project how to (basic prj creation tried explaining the spring suite tool starter io which added dependency created pom file and how to write service, make entity, controllers etc.)
- 13. Why not go for asp net you could have directly created the major prj from database using import from and save time.
 - (looking for reasoning why opted for java based project.)
- 14. If you have done in dot net u could have saved on the angular part to why choose angular for design instead.
- 15. Any technology you tried to implement in project & if you failed at any newer ones. (said about integration using git for collaboration along with notion for keeping task tabs. Tried deploying the prj on hosting like gitpages, Heroku but weren't fully successfull due to credut card requirement, AWS was on discussion but same for CC reasons but explained how was the plan to host it on S3)
- 16. Due to pandemic how did you keep touch with everyone for collobrations and doubt resolution. (github and notion for collaboration, zoom and MS teams for meetings/screen sharing code reviews, google drive for sharing files along with telegram for discussion & keeping updates)
- 17. 1 logical puzzle
 - Say there is a 100 floor building and u have cheap phones (infinite quantity).we have to check from which floor would the phone start breaking.
 - (checking for iteration logic and how reasonable the answer was finally answered that it may or may not be actually be possible to estimate the correct floor just we can reduce the iterations to minimum no of floors but not in a go can we determine which floor it will be.

Few HR type Questions

- 1. If you were given 2 offers 1 paying more than the other company which would u opt?
- 2.If in future you get a job in government sector would u consider.
- 3.Say the offer is related to IT, cloud computing and is government would be your choice,
- 4.Say we choose you in our company & settle u in some department and few years after you get an offering from outside for cloud computing aws stuff which u are interested in would u give up on the offer and continue in the pri/department u r assigned here.

Round 4 (HR Interview L3-Interview, 16/02/2021) – Didn't Receive a call.Rejected For HR Interview.

Morning star interview questions -Feb 2021 Ravi Verma

Level 1: Technical

- 1. Introduce yourself
- 2. Explain your project
- 3. What how you've used all the OOPs principles in your project?
- 4. What is polymorphism?
- 5. What is abstraction and encapsulation?
- 6. Difference between an abstract and an interface.
- 7. Various scenarios related to default methods were asked (What it I have 2 interfaces and both the default methods in these interfaces have same names and a class just implements these interfaces- will the program run? Now if we create the object of my class and call the default method on that object (without overriding the method in my class) will the program compile? What if I want to call the default method of any 1 of the interfaces in my class, what code should I write)?
- 8. Write a program to count all the occurrence of all the words in a paragraph.
- 9. Which amongst the String and StringBuilder is preferred if you want to append a substring inside each iteration of the loop and create a statement?
- 10. Explain stack data structure
- 11. Which data structure will you use to display a statement in a reverse order eg. My name is Ravi Verma, the output should be Verma Ravi is name My?
- 12. Can you explain me how linear search algorithm works?
- 13. Can you explain me the scenario where I using Binary search will be most efficient?
- 14. Explain all the DDL, DML commands in MySql
- 15. Truncate Vs Delete
- 16. In what format was the sensitive information like password was saved in your project? How will you make sure that the sensitive information goes inside the database in encrypted format?
- 17. What is Hibernate?
- 18. How does the dataflow happens between the middle tier and the backend?
- 19. Are you aware of HTML and CSS?
- 20. Can you explain the usage of JavaScript?
- 21. Explain how will you validate a form using JavaScript

Level 2: Technical + Managerial

1. Introduce yourself that includes everything like where you live, where have you completed your education, hobbies, etc

- 2. Walk me through your CDAC project and what re have you played
- 3. What is abstraction and encapsulation?
- 4. What is Dependency Injection?
- 5. Explain me the architectural decisions in your project and explain each of them in detail.
- 6. What if you have your project in production and your website fails after some period of time at the time 1000's of users try to register at your project. How will you deal with the situation?
- 7. What is Normalisation?
- 8. Explain all the DDL, DML, DCL and TCL commands in MySql
- 9. What will be your responsibility if you're the Team Leader of a particular project?
- 10. What is waterfall model?
- 11. What is Agile model?
- 12. What is scrum and various roles in scrum?
- 13. Enlist various testing tools that you can use in your project.
- 14. Enlist various deployment tools
- 15. How will you ensure that your website is secure?
- 16. How did you get to know about Morning Star?
- 17. Why do you want to join Morning Star?
- 18. How were you guided by your mentor related to carrier aspect(since he works at Morning star)?
- 19. How do you keep yourself updated with the latest technologies and advancements in IT?

Level 3: HR

- 1. Walk me through your resume
- 2. How was your experience in the entire recruitment process?
- 3. Explain your project?
- 4. How did you get to know about Morning Star?
- 5. Why do you want to join Morning Star?
- 6. Are you comfortable travelling from your home to office everyday?

Bharatsingh Rathore (morning Star)

Morningstar

.NET Questions

- 1. Tell me about yourself
- 2. Project tech stack
- 3. What is .net framework
- 4. What is msil, clr,cts
- 5. Flow of .net file/how code compiles
- 6. Exception used in project
- 7. What is entity framework
- 8. Design methodology for db used
- 9. Can we have 2 web.config file
- 10. What is global.asax used for
- 11. What is caching
- 12. Managed vs unmanaged code
- 13. Have u hosted your project using its server?

DSA Questions

- 1. Greedy vs dynamic
- 2. What algo will u use for solving longest common subsequence problem
- 3. How will u use dynamic for above question

- 4. Print duplicates from string/array without Collections
- 5. Fibonacci using recursion

SQL Question

Generalised query for Nth highest value which works in all DB(i.e without using rownum,limit offset)

Pravin Jagdale

Round 1

- 1 tell us about your latest project you worked on?
- 2 whats your role in your project
- 3 explain how did you achieved OOPS concepts in your project
- 4 how will you create REST service
- 5 what is dependancy injection and how it actually works
- 6 suppose I have one interface and it has more implementations in Controller class you have instance variable as interface as it has many implementations I want to pass particular implementation

how will you do using dependancy injection

- 7 in what format data traverse from angular to REST
- 8 which methods are used to send data from angular to REST
- 9 differnces between get put post delete methods in angular and how they work
- 10 how did u integrated angular with spring boot

```
11 String s1 = "morningstar"
    String s2=null;
    SOP(s1.concat(s2)) //what will be output over here
12 class a
     {
      public void show()
       cw("1");
     }
     class b: a
     public new void show()
       cw("2");
     }
     class c
        {
      psvm()
        b ob2 = new b();
         ob2.show();
                            //o/p?? and why
       a ob1 = new b();
        ob1.show();
                           // o/p?? and why
       }
        }
```

```
13 class a
     {
         a()
          sop("from a")
      }
      class b: a
         b()
          sop("from b")
      class c
         psvm()
           b ob = new b(); //o/p?? explain why??
      }
14 table1
                    table2
     id
                     id
     1
                      1
     1
                      1
     1
                      1
     apply left join, right join, inner join
15
     solve pattern
     1
     10
     101
     1010
     10101
     101010
```

16 I want to find particular element present in an array give the approach to find it

17 can we have multiple catch blocks? if not why and if yes explain how?

18 can a try block contain finally block?

19 questions on automatic garbage collection (how java does garbage collection and related questions)

ROUND 2

- 1 difference between class and interface
- 2 real life example for method overloading
- 3 what is covarient return type and what will happen if we make overridden method as of type child

- 4 explain and implement calculator (suggestion:- apply all oops concept here)
- 5 what are directives and their types
- 6 what is ngModel
- 7 write a query for stored procedure
- 8 what are triggers and write one trigger

Aafrin Ansari, PG-DAC Feb'20

Morningstar

Dt: 15th,16th Feb'21

ROUND1: Technical

- 1. Introduce yourself.
- 2. Tell me about the projects you have done. [B.E. + CDAC]
- 3. Explain your B.E. project in detail.
- 4. What was your role in the project?
- 5. Which lanaguages are you comfortable in?
- 6. Database used in the project

- 7. What is OOPS?
- 8. How is OOPs different from from functional based programming.
- 9. What is object?
- 10. What is class?
- 11. What do you mean by encapsulation?
- 12. Method overloading and overriding
- 13. How would you provide copy constructor? [JAVA]
- 14. What is exception? How will you handle it?
- 15. Explain finally block.
- 16. What is automatic garbage collection?

- 17. What is data structure?
- 18. Explain linked list.18. Give some applications of data structures.
- 19. Doubly linked list.

Pseudo codes for below questions

20.

Array A- some numbersthe given example conveyed it was sorted.

Array B- some random numbers.

Algorithm to check which element of A is not present in B

21.
Array with unsorted numbers
Find the 2nd highest number.
22.
string = something..
How to find the occurence of a given character..suppose 'a'

- 23. What is MySQL?
- 24. State some features of MySQL
- 25. Database vs Table
- 26. Alter commands

change table name

change column name

remove a column from the table

27. Truncate vs Delete. For what reason is truncate preferred?

- 28. Explain MVC architecture.
- 29. What is Servlet?
- 30. What is ORM and state some advantages of it.

- 31. What is service in Angular?
- 32. What is component?
- 33. What does a component contain?
- 34. Explain routing.
- 35. What is package.json file? Where is it located?
- 36. ngIf directive
- 37. What is Dependency Injection?

ROUND2: Tech-Managerial

- 1. Tell me what technology are you aware of so that I can set the tone for the interview?
- 2. As you mentioned you're from non-IT background, why are you interested in IT?
- 3. What was your project in CDAC? What was your role in it?
- 4. What is immutable class?
- 5. Give other examples of immutable class. Also tell me how to make a class immutable in java?
- 6. What is static in java?
- 7. Difference between final and finally. Can we use finally without try-catch?

- 8. What is Class.forName?
- 9. Explain public static void main(String[] args)
- 10. JDBC Connection string
- 11. What is Prepared statement?
- 12. What is Statement in jdbc?

- 13. How much do you know about MySQL?
- 14. How does Mysql maintain consistency? ----- (aCid property!)

- 15. What version of Angular did you use?
- 16. Web service consumed in the project?
- 17. Angular components

- 18. What did you use to version control your project? Explain how did you manage it.
- 19. Git clone, add, commit, push, checkout

ROUND3: HR

- 1. Guide me through your profile.
- 2. Did you know about Morningstar before?
- 3. What expectations do you have from our company?
- 4. What were you thinking when you applied for this job? Why did you apply?
- 5. Tell me about your CDAC project in a way you'd explain it to a person with non technical background. How many team members did you have?
- 6. What did you learn while working on your project?
- 7. Do you have any inclination towards any technology?
- 8. What did you feel about your interviewrs from Morningstar so far?
- 9. Questions about relocation, willing to join asap or not, family etc.

ADITYA TRIVEDI

- -->Introduce YouSelf.
- -->Tell ME About Your project
- -->Descripe Entire Flow OF Project
- -->Explain All Spring Boot Annotations
- -->Write Code OF Your Model/Pojo Classes OF your Spring Boot PRoject.
- -->Write Code Of Any one Request Handler Method OF Your Project(Login, registrations or Bookings)
- -->What is Hibernate
- --> Why Jpa over HIbernate
- -->Why Spring
- -->What You Write In Apllication Properties Inside Your Spring Boot Project.
- -->What IS Component, Service In Angular.
- -->How To Share Data Between Two Components

- -->Explain Angular LifeCycle Hooks
- -->Can You Consider Your Angular Project As MVC(Ans Is Yes, You Can)
- -->What You DId To Provide Safety & Security IN Your Project
- --> What Do You Mean By Responsive Website, And How to Achieve it.
- -->Issues You Faced In Your Project.
- -->Why Type Script Over Angular
- -->Explain Observables.(Explain Entire Flow).
- -->What IS OOPS
- -->Oops 4 pillers With Example
- -->Abstraction and Encapsulation with example (code).
- -->Diffrence Between Abstraction and Encapsulation .
- -->Collection Api In Java .
- -->Exception HAndling
- -->Stack code
- -->Linked LIst Code.
- -->Stack vs Linked List.
- -->Bubble sort Code.
- -->Fastest Sorting Algo.
- -->Explain Quick Sort.
- -->Joins
- -->Triggers
- -->Where Could you Use TRiggers in Your PRoject
- -->What is Software Dev Waterfall MOdel
- -->What is Agile
- -->What Software Dev MEthodology You used in your Project(Watterfall or Agile)?
- -->What Do You KNow About Deployment Of Websites.
- -->Difference Between TRiggers And Stored PRocedures
- -->what are Indexes
- -->Clustered And Non-Clustered Indexes
- -->Joins(They Give you diffrent o/p cases And asks Us which Join would Help us Achieve that perticular o/p)
- -->what is Normalization and explain it forms
- -->Four people come to a river in the night. There is a narrow bridge, but it can only hold two people at a time. They have one torch and, because it's night, the torch has to be used when crossing the bridge. Person A can cross the bridge in 1 minute, B in 2 minutes, C in 5 minutes, and D in 8 minutes. When two people cross the bridge together, they must move at the slower person's pace. The question is, can they all get across the bridge if the torch lasts only 15 minutes?
- -->You have two ropes coated in an oil to help them burn. Each rope will take exactly 1 hour to burn all the way through. However, the ropes do not burn at constant rates—there are spots where they burn a little faster and spots where they burn a little slower, but it always takes 1 hour to finish the job.

With a lighter to ignite the ropes, how can you measure exactly 45 minutes?

SHUBHAM PALAV

Round 1:

- Introduce yourself.
- Explain your DAC project. Technologies used in your project.
- How did you manage Registration and Login in your project.
- @GetMapping and @PostMapping.
- Why Angular? Explain routing in Angular.
- What are Observables.
- Explain OOPS concepts w.r.t. your project implementation.
- Interface vs Abstraction. When to use what.
- What is normalization in database? What is the need of normalization? Explain anomalies that come with non-normalized tables.
- Normalization types.
- Explain joins. Types of joins.
- What is Inner Join? What is Right Outer join? Give an example using tables.
- Explain working of any of the sorting algorithms.
- Quick Sort vs Merge Sort.

Round 2:

- Explain your DAC project architecture. What was your role in the project.
- Explain REST. Why did you use RESTful over normal servlet technology in your project.
- Explain your B.E. project. What was your role in the project. In-depth working of project, libraries used and algorithm used(Since it was an ML project).
- If I write multiple main methods in my class, will the program compile. If yes, why? If no, why?
- How does System.out.println work?
- I am selling you a pen for 100Rs and making a profit of 20%. At what price did I buy the pen.(He just needed the approach and not calculations)
- What is the probability that 1st of January falls on a Monday.
- How would you cut a cake in 5 equal pieces without lifting the knife.
- What is Big O notation. What is complexity in algorithms. Which is the best complexity you have come across. Which algorithm?
- What is a linked list. Explain structure of a linked list. Traversal, Insertion on a linked list.
- Explain doubly linked list.

Round 3:

- Introduce yourself.
- Give me an explanation/overview of your project considering I am a layman.
- Tell me about your career so far. (As I had mentioned I had an experience of a year).
- What were your contributions towards your team in DAC.
- Any specific preference/inclination towards a particular technology.
- What would be your short term and long term goals.
- Would you be able to join us immediately.

Sumit Chaure

Candidate Name: Sumit S. Chaure

Batch: Feb 2020

Company Name: Morning Star

Profile: Associate Software Engineer

Pre-placement talk (12/02/2021 10:30am)

Round 1(12/02/2021 11:30am):

Apti-Quants & Techincal Test On Cocubes

(Basic Aptitude on number system, percentage, profit loss discount, age, time work, probability, etc.

passage question, reasoning basic questions.

Technical section included snippets, error identification, basic dbt query, etc.)

Round 2 (Technical Interview L1-Interview, 15/02/2021, 10:00-10:45 am)

- 1. Tell me about yourself.
- 2. What was your project(CDAC Project)?
- 3. Give some case of working.

(like example of the project in real life or website eg in my case I gave examples of amazon,flipkart,Alibaba,ebay,myntra,bewakoof,shopify stores and explained a few difference of these sites like retail based, consumer oriented,wholesale trader,company based,etc)

4. Elaborate it.

(Explain the CDAC project ,its workflow, various options & or operations successfully implemented on the project work.)

5. What did u do to make the website work?

(details about technologies and framework implemented ie Angular on Front end, Java springboot on the backend backed by MySQL for database implementation and few api/cdn used in prj.)

6. What was your contribution to the project?

(Brief explanation on what I did on the technical front implementation.)

7. What was the project actually about[as in presenting to a client what the product was in this case a website say like a short verbal SR/BRD of the project]

(B2C website/webapp short description using a real-life website eg to give clear idea about the project.)

8. Which front did u majorly contribute?

(Front Or Back end one word answer no explanation or elaboration)

9. How did you manage the database in your project.

(Simple short database flow no table explanation just basic)

- 10. How did u achieve the front and backend integration?
- 11. OOPS Concepts.

(Definition in your language no concrete definition pls with separate examples for each pillars)

12. Did You Do hardcoded queries in your database.

(Yes/no with reason)

- 13. What was not manageable in your project or what was not fully incorporated/implemented in your project.
- 14. Oops concepts 1 example reflecting every oops concept in one example.
- 15. Give a technical demo/example of Polymorphism.
- 16. Suppose if there is a protected method inside a class say as in your eg of class car and can we make a call to call these protected method, is it possible.
- 17. What did you do in angular front.
 - (brief about the components, services, validations I did on the angular front)
- 18. Asked about the services u wrote and explain them in brief what they did and what was the logic in them.
- 19. How did u achieve data integration part?
- 20. What are the basics in Angular?

(said about modules, directives, services, components, pipes, templates etc)

21. Why only angular?

(why not react js or vue or something other on the front end

Explained a few features why angular is good choice for website design)

22. Why do u think angular is better than traditional asp net or html webpages.

(same gave features of angular and few drawbacks of traditional technologies.)

23. Can u give example of angular or dynamic sites

(gave example of Instagram, facebook app, youtube, reditt and few other and explained what dynamic websites, single page apps are and different from traditional webpages)

- 24. Was their any joins in Database?
- 25. What is that loading called where data does not load immediately rather waits for interactions like click or scroll or orientation etc?
- 26. How did you fill up data in multiple?

(Didn't get the question maybe it was data from or to database and front end)

- 27. Validations on Login logout registration & other forms. Explain the logic not the service completely. (Just said about the minimum length check email id validations, date check, mandatory fields check, some restricted words check say admin as username, invalid entry checks etc. on the front end only though)
- 28. You said there is a Reactive form on cart/order page and registration one which validations did you implement their.
- 29. Explain the process after Submission in short.

(the process after order is placed we had token number generation, dipaly invoice, a thank you popup, redirect to homepage after clicking ok)

- 30. One question traversal in Linked list.
- 31. Few Questions On DS basic like what is stack, queue, LL and eg real life, also which one would be preferred for an example the interviewer asked.
- 32. Explain what is stack, its implementation, real life example.
- 33. Suppose there is a list which has duplicate values how will ypu find a particular said value from these list(traversal logic and complexity based explanation)
- 34. What was your BE project about.

(No explanation just brief as it was a mechanical one so just the summary)

- 35. Gave A logical problem and asked its logic roughly how the prg would give the said result.
- 36. Basic Swap 2 variables prg logic part.

(Gave the basic temp variable one)

37. Without using temp variable can u swap 2 numbers.

(Said about bit-wise operator & Arithmetic one)

- 38. Are there any more ways to swap 2 variables.
- 39. 1 more logic based prg on DS cum c program
- 40. 2 Scenario based questions on project if user visits the site and this happens how would the site respond or what happens after the said situation

(Forgot the scenario but were basic user interaction with the website.

- 41. End Question Where do u see yourself in 5 years?
- 42. Why Shifted to IT from mechanical?

- 1. How Was You Day & How did you interview go?
- 2. Tried Relaxing me by asking about the overall interview experience by rating it for a fresher 1st interview.
- 3. Introduce Yourself.
- 4. So you're from mechanical why did you opt for cdac and basical towards IT sector.
- 5. How was your CDAC journey what new things did u learn in these past months also how did you cope up with lockdown,pandemic,new studies & pressure?

Technical Part

- 1. Explain your project in short no technical approach just layman layout of ur project view.
- 2. Basic DS questions on stack, queue, LL and example identification which DS would fit the best for this eg.
- Did u apply any DS concepts in your project.
 (said about sorting of products and for search used some algorithms concepts,list,array and few other DS concept used in prj).
- 4. DBT 2 basic query on employee salary db.
- 5. DB concepts used in the project like event, joins, triggers any SP, query, etc.
- 6. Why not use html as in angular u have to design css and html anywyas why do more coding. (angular benefits over html).
- 7. Few basic questions on node and angular like what is a service,ng commands,why use node for angular.
- 8. How the data gets passed from front to back or vice versa. (data integration between java nd angular with DB).
- 9. Questions On Core Java from threads, exception basics, oops concept.
- 10. From advanced java only project related questions like why spring boot for ur project.
- 11. What is hibernate and its use.
- 12. Springboot project how to (basic prj creation tried explaining the spring suite tool starter io which added dependency created pom file and how to write service, make entity, controllers etc.)
- 13. Why not go for asp net you could have directly created the major prj from database using import from and save time.
 - (looking for reasoning why opted for java based project.)
- 14. If you have done in dot net u could have saved on the angular part to why choose angular for design instead.
- 15. Any technology you tried to implement in project & if you failed at any newer ones. (said about integration using git for collaboration along with notion for keeping task tabs. Tried deploying the prj on hosting like gitpages, Heroku but weren't fully successfull due to credut card requirement, AWS was on discussion but same for CC reasons but explained how was the plan to host it on S3)
- 16. Due to pandemic how did you keep touch with everyone for collobrations and doubt resolution. (github and notion for collaboration, zoom and MS teams for meetings/screen sharing code reviews, google drive for sharing files along with telegram for discussion & keeping updates)
- 17. 1 logical puzzle
 - Say there is a 100 floor building and u have cheap phones (infinite quantity).we have to check from which floor would the phone start breaking.
 - (checking for iteration logic and how reasonable the answer was finally answered that it may or may not be actually be possible to estimate the correct floor just we can reduce the iterations to minimum no of floors but not in a go can we determine which floor it will be.

Few HR type Questions

- 1. If you were given 2 offers 1 paying more than the other company which would u opt?
- 2.If in future you get a job in government sector would u consider.
- 3.Say the offer is related to IT, cloud computing and is government would be your choice,
- 4.Say we choose you in our company & settle u in some department and few years after you get an offering from outside for cloud computing aws stuff which u are interested in would u give up on the offer and continue in the pri/department u r assigned here.

Round 4 (HR Interview L3-Interview, 16/02/2021) – Didn't Receive a call.Rejected For HR Interview.

Morning star interview questions -Feb 2021 Ravi Verma

Level 1: Technical

- 1. Introduce yourself
- 2. Explain your project
- 3. What how you've used all the OOPs principles in your project?
- 4. What is polymorphism?
- 5. What is abstraction and encapsulation?
- 6. Difference between an abstract and an interface.
- 7. Various scenarios related to default methods were asked (What it I have 2 interfaces and both the default methods in these interfaces have same names and a class just implements these interfaces- will the program run? Now if we create the object of my class and call the default method on that object (without overriding the method in my class) will the program compile? What if I want to call the default method of any 1 of the interfaces in my class, what code should I write)?
- 8. Write a program to count all the occurrence of all the words in a paragraph.
- 9. Which amongst the String and StringBuilder is preferred if you want to append a substring inside each iteration of the loop and create a statement?
- 10. Explain stack data structure
- 11. Which data structure will you use to display a statement in a reverse order eg. My name is Ravi Verma, the output should be Verma Ravi is name My?
- 12. Can you explain me how linear search algorithm works?
- 13. Can you explain me the scenario where I using Binary search will be most efficient?
- 14. Explain all the DDL, DML commands in MySql
- 15. Truncate Vs Delete
- 16. In what format was the sensitive information like password was saved in your project? How will you make sure that the sensitive information goes inside the database in encrypted format?
- 17. What is Hibernate?
- 18. How does the dataflow happens between the middle tier and the backend?
- 19. Are you aware of HTML and CSS?
- 20. Can you explain the usage of JavaScript?
- 21. Explain how will you validate a form using JavaScript

Level 2: Technical + Managerial

1. Introduce yourself that includes everything like where you live, where have you completed your education, hobbies, etc

- 2. Walk me through your CDAC project and what re have you played
- 3. What is abstraction and encapsulation?
- 4. What is Dependency Injection?
- 5. Explain me the architectural decisions in your project and explain each of them in detail.
- 6. What if you have your project in production and your website fails after some period of time at the time 1000's of users try to register at your project. How will you deal with the situation?
- 7. What is Normalisation?
- 8. Explain all the DDL, DML, DCL and TCL commands in MySql
- 9. What will be your responsibility if you're the Team Leader of a particular project?
- 10. What is waterfall model?
- 11. What is Agile model?
- 12. What is scrum and various roles in scrum?
- 13. Enlist various testing tools that you can use in your project.
- 14. Enlist various deployment tools
- 15. How will you ensure that your website is secure?
- 16. How did you get to know about Morning Star?
- 17. Why do you want to join Morning Star?
- 18. How were you guided by your mentor related to carrier aspect(since he works at Morning star)?
- 19. How do you keep yourself updated with the latest technologies and advancements in IT?

Level 3: HR

- 1. Walk me through your resume
- 2. How was your experience in the entire recruitment process?
- 3. Explain your project?
- 4. How did you get to know about Morning Star?
- 5. Why do you want to join Morning Star?
- 6. Are you comfortable travelling from your home to office everyday?

Bharatsingh Rathore (morning Star)

Morningstar

.NET Questions

- 1. Tell me about yourself
- 2. Project tech stack
- 3. What is .net framework
- 4. What is msil, clr,cts
- 5. Flow of .net file/how code compiles
- 6. Exception used in project
- 7. What is entity framework
- 8. Design methodology for db used
- 9. Can we have 2 web.config file
- 10. What is global.asax used for
- 11. What is caching
- 12. Managed vs unmanaged code
- 13. Have u hosted your project using its server?

DSA Questions

- 1. Greedy vs dynamic
- 2. What algo will u use for solving longest common subsequence problem
- 3. How will u use dynamic for above question

- 4. Print duplicates from string/array without Collections
- 5. Fibonacci using recursion

SQL Question

Generalised query for Nth highest value which works in all DB(i.e without using rownum,limit offset)

Pravin Jagdale

Round 1

- 1 tell us about your latest project you worked on?
- 2 whats your role in your project
- 3 explain how did you achieved OOPS concepts in your project
- 4 how will you create REST service
- 5 what is dependancy injection and how it actually works
- 6 suppose I have one interface and it has more implementations in Controller class you have instance variable as interface as it has many implementations I want to pass particular implementation

how will you do using dependancy injection

- 7 in what format data traverse from angular to REST
- 8 which methods are used to send data from angular to REST
- 9 differnces between get put post delete methods in angular and how they work
- 10 how did u integrated angular with spring boot

```
11 String s1 = "morningstar"
    String s2=null;
    SOP(s1.concat(s2)) //what will be output over here
12 class a
     {
      public void show()
       cw("1");
     }
     class b: a
     public new void show()
       cw("2");
     }
     class c
        {
      psvm()
        b ob2 = new b();
         ob2.show();
                            //o/p?? and why
       a ob1 = new b();
        ob1.show();
                           // o/p?? and why
       }
        }
```

```
13 class a
     {
         a()
          sop("from a")
      }
      class b: a
         b()
          sop("from b")
      class c
         psvm()
           b ob = new b(); //o/p?? explain why??
      }
14 table1
                    table2
     id
                     id
     1
                      1
     1
                      1
     1
                      1
     apply left join, right join, inner join
15
     solve pattern
     1
     10
     101
     1010
     10101
     101010
```

16 I want to find particular element present in an array give the approach to find it

17 can we have multiple catch blocks? if not why and if yes explain how?

18 can a try block contain finally block?

19 questions on automatic garbage collection (how java does garbage collection and related questions)

ROUND 2

- 1 difference between class and interface
- 2 real life example for method overloading
- 3 what is covarient return type and what will happen if we make overridden method as of type child

- 4 explain and implement calculator (suggestion:- apply all oops concept here)
- 5 what are directives and their types
- 6 what is ngModel
- 7 write a query for stored procedure
- 8 what are triggers and write one trigger

Aafrin Ansari, PG-DAC Feb'20

Morningstar

Dt: 15th,16th Feb'21

ROUND1: Technical

- 1. Introduce yourself.
- 2. Tell me about the projects you have done. [B.E. + CDAC]
- 3. Explain your B.E. project in detail.
- 4. What was your role in the project?
- 5. Which lanaguages are you comfortable in?
- 6. Database used in the project

- 7. What is OOPS?
- 8. How is OOPs different from from functional based programming.
- 9. What is object?
- 10. What is class?
- 11. What do you mean by encapsulation?
- 12. Method overloading and overriding
- 13. How would you provide copy constructor? [JAVA]
- 14. What is exception? How will you handle it?
- 15. Explain finally block.
- 16. What is automatic garbage collection?

- 17. What is data structure?
- 18. Explain linked list.18. Give some applications of data structures.
- 19. Doubly linked list.

Pseudo codes for below questions

20.

Array A- some numbersthe given example conveyed it was sorted.

Array B- some random numbers.

Algorithm to check which element of A is not present in B

21.
Array with unsorted numbers
Find the 2nd highest number.
22.
string = something..
How to find the occurence of a given character..suppose 'a'

- 23. What is MySQL?
- 24. State some features of MySQL
- 25. Database vs Table
- 26. Alter commands

change table name

change column name

remove a column from the table

27. Truncate vs Delete. For what reason is truncate preferred?

- 28. Explain MVC architecture.
- 29. What is Servlet?
- 30. What is ORM and state some advantages of it.

- 31. What is service in Angular?
- 32. What is component?
- 33. What does a component contain?
- 34. Explain routing.
- 35. What is package.json file? Where is it located?
- 36. ngIf directive
- 37. What is Dependency Injection?

ROUND2: Tech-Managerial

- 1. Tell me what technology are you aware of so that I can set the tone for the interview?
- 2. As you mentioned you're from non-IT background, why are you interested in IT?
- 3. What was your project in CDAC? What was your role in it?
- 4. What is immutable class?
- 5. Give other examples of immutable class. Also tell me how to make a class immutable in java?
- 6. What is static in java?
- 7. Difference between final and finally. Can we use finally without try-catch?

- 8. What is Class.forName?
- 9. Explain public static void main(String[] args)
- 10. JDBC Connection string
- 11. What is Prepared statement?
- 12. What is Statement in jdbc?

- 13. How much do you know about MySQL?
- 14. How does Mysql maintain consistency? ----- (aCid property!)

- 15. What version of Angular did you use?
- 16. Web service consumed in the project?
- 17. Angular components

- 18. What did you use to version control your project? Explain how did you manage it.
- 19. Git clone, add, commit, push, checkout

ROUND3: HR

- 1. Guide me through your profile.
- 2. Did you know about Morningstar before?
- 3. What expectations do you have from our company?
- 4. What were you thinking when you applied for this job? Why did you apply?
- 5. Tell me about your CDAC project in a way you'd explain it to a person with non technical background. How many team members did you have?
- 6. What did you learn while working on your project?
- 7. Do you have any inclination towards any technology?
- 8. What did you feel about your interviewrs from Morningstar so far?
- 9. Questions about relocation, willing to join asap or not, family etc.

ADITYA TRIVEDI

- -->Introduce YouSelf.
- -->Tell ME About Your project
- -->Descripe Entire Flow OF Project
- -->Explain All Spring Boot Annotations
- -->Write Code OF Your Model/Pojo Classes OF your Spring Boot PRoject.
- -->Write Code Of Any one Request Handler Method OF Your Project(Login, registrations or Bookings)
- -->What is Hibernate
- --> Why Jpa over HIbernate
- -->Why Spring
- -->What You Write In Apllication Properties Inside Your Spring Boot Project.
- -->What IS Component, Service In Angular.
- -->How To Share Data Between Two Components

- -->Explain Angular LifeCycle Hooks
- -->Can You Consider Your Angular Project As MVC(Ans Is Yes, You Can)
- -->What You DId To Provide Safety & Security IN Your Project
- --> What Do You Mean By Responsive Website, And How to Achieve it.
- -->Issues You Faced In Your Project.
- -->Why Type Script Over Angular
- -->Explain Observables.(Explain Entire Flow).
- -->What IS OOPS
- -->Oops 4 pillers With Example
- -->Abstraction and Encapsulation with example (code).
- -->Diffrence Between Abstraction and Encapsulation .
- -->Collection Api In Java .
- -->Exception HAndling
- -->Stack code
- -->Linked LIst Code.
- -->Stack vs Linked List.
- -->Bubble sort Code.
- -->Fastest Sorting Algo.
- -->Explain Quick Sort.
- -->Joins
- -->Triggers
- -->Where Could you Use TRiggers in Your PRoject
- -->What is Software Dev Waterfall MOdel
- -->What is Agile
- -->What Software Dev MEthodology You used in your Project(Watterfall or Agile)?
- -->What Do You KNow About Deployment Of Websites.
- -->Difference Between TRiggers And Stored PRocedures
- -->what are Indexes
- -->Clustered And Non-Clustered Indexes
- -->Joins(They Give you diffrent o/p cases And asks Us which Join would Help us Achieve that perticular o/p)
- -->what is Normalization and explain it forms
- -->Four people come to a river in the night. There is a narrow bridge, but it can only hold two people at a time. They have one torch and, because it's night, the torch has to be used when crossing the bridge. Person A can cross the bridge in 1 minute, B in 2 minutes, C in 5 minutes, and D in 8 minutes. When two people cross the bridge together, they must move at the slower person's pace. The question is, can they all get across the bridge if the torch lasts only 15 minutes?
- -->You have two ropes coated in an oil to help them burn. Each rope will take exactly 1 hour to burn all the way through. However, the ropes do not burn at constant rates—there are spots where they burn a little faster and spots where they burn a little slower, but it always takes 1 hour to finish the job.

With a lighter to ignite the ropes, how can you measure exactly 45 minutes?

SHUBHAM PALAV

Round 1:

- Introduce yourself.
- Explain your DAC project. Technologies used in your project.
- How did you manage Registration and Login in your project.
- @GetMapping and @PostMapping.
- Why Angular? Explain routing in Angular.
- What are Observables.
- Explain OOPS concepts w.r.t. your project implementation.
- Interface vs Abstraction. When to use what.
- What is normalization in database? What is the need of normalization? Explain anomalies that come with non-normalized tables.
- Normalization types.
- Explain joins. Types of joins.
- What is Inner Join? What is Right Outer join? Give an example using tables.
- Explain working of any of the sorting algorithms.
- Quick Sort vs Merge Sort.

Round 2:

- Explain your DAC project architecture. What was your role in the project.
- Explain REST. Why did you use RESTful over normal servlet technology in your project.
- Explain your B.E. project. What was your role in the project. In-depth working of project, libraries used and algorithm used(Since it was an ML project).
- If I write multiple main methods in my class, will the program compile. If yes, why? If no, why?
- How does System.out.println work?
- I am selling you a pen for 100Rs and making a profit of 20%. At what price did I buy the pen.(He just needed the approach and not calculations)
- What is the probability that 1st of January falls on a Monday.
- How would you cut a cake in 5 equal pieces without lifting the knife.
- What is Big O notation. What is complexity in algorithms. Which is the best complexity you have come across. Which algorithm?
- What is a linked list. Explain structure of a linked list. Traversal, Insertion on a linked list.
- Explain doubly linked list.

Round 3:

- Introduce yourself.
- Give me an explanation/overview of your project considering I am a layman.
- Tell me about your career so far. (As I had mentioned I had an experience of a year).
- What were your contributions towards your team in DAC.
- Any specific preference/inclination towards a particular technology.
- What would be your short term and long term goals.
- Would you be able to join us immediately.