**Indumathi Aspire System L-1 18th Nov 2024**

1. Introduce yourself
2. Explain your project
3. Explain the roles and responsibilities of your project
4. Do you know Microservices? Explain
5. Difference between Microservices and Monolithic architecture?
6. How will you authorize a REST API?
7. What is JWT? What is inside it?
8. What is API gateway and why do we need it?
9. What is ACID principle?
10. Why transactions are not visible?
11. How would you manage transactions across multiple services when fetching employee details with each service using a separate database to store data?
12. What is @Transactional?
13. Why do we put @Transactional in service layer?
14. Why are you not adding @Transactional in controller layer?
15. Explain Java 8 features.
16. Why default and static methods are introduced in interfaces and what is their advantage?
17. How to overcome diamond problem in interface?
18. Explain the Internal Implementation of HashMap?
19. Why implementation is changed to a binary tree in Java?
20. Suppose you have a Map with a key and an associated value. If you use the same key again and add a new value, what will happen?
21. Explain ACID? How it is integrating table?
22. Explain Stream API
23. Find the majority element in the given array. [3, 3, 4, 2, 4, 4, 2, 4, 4]

**Arpitha N Aspire System L-1 18th Nov 2024**

1. Self-introduction.
2. Which version of Java are you using in your project?
3. Explain Java 8 features briefly.
4. Some scenario-based questions on the interface.
5. Explain the ArrayList in the collection framework.
6. How do you create an immutable class in Java?
7. Suppose there are duplicates in the ArrayList, then how do you remove duplicates in the ArrayList?
8. Explain whether equals() and hashcode() method will work in hashset?
9. Tell me the steps on how to secure the API.
10. How to handle transactions in multiple tables?
11. In which layer did you mention the @Transactional annotation?
12. Find the leaders in an array. The leader is an element that is greater than all the elements to the right side of it.

(Use single loop) Input: A[] = [16,17,4,3,7,2] Output: [17,7,2]

1. There is a Student class, which contains attributes like studentId, studentName, studentGrade, and StudentMarks. Calculate the sum of marks in each grade and get the top two records based on the total marks within each grade by using stream API.

**Yeshwanthrao M G Aspire System L-1 16th Nov 2024Interviewer –** Sharanya Eswarlal

1. What is the difference between Spring and Spring Boot?2. How do you handle multiple beans of the same type in a Spring application?3. Which exception should be used in global exception handling with @ControllerAdvice and @ExceptionHandler in Spring?4. Explain try, catch, throw, and throws in Java.5. If a try block is present without a catch block, what happens?6. What is the purpose of the final keyword in Java?7. Explain the difference between the Runnable and Callable interfaces.8. What is multithreading in Java, and how is it implemented?9. What are the steps to create a Spring Boot application?10. What is the difference between an Entity object and a DTO object?11. What is the H2 database?12. What are the differences between SQL and NoSQL databases?13. What is the difference between a Primary Key and a Unique Key?14. How do you configure MySQL for use in a Spring Boot application?15. Write an SQL query to find the second-highest salary of an employee.16. Write code to generate all permutations of the string "abc".17. How do you configure SQL in a Spring Boot application?18. What is the difference between the @POST and @PUT annotations in REST APIs?19. How can you initialize database fields before starting a Spring Boot application?20. What is the difference between the equals() method and the == operator in Java?21. What is the difference between checked and unchecked exceptions in Java?22. Which types of exceptions should be handled in a Java application?23. What are design patterns, and how are they useful in software development?24. How do you write test cases using JUnit and Mockito?

**Nareshkannan N Aspire System L-1 16th Nov 2024Interviewer –** Arun Janardhan

1.Introduce yourself.2.What is monolithic architecture?3.What is the difference between microservices and monolithic architecture?4.What is Java? Explain its features.5.What is OOPs?6.Define data types in Java.7.When do you prefer primitive and non-primitive data types?8.Explain OOPs concepts with examples.9.What is the difference between a constructor and a method?10.What is typecasting in Java?11.What is an exception? Explain its types with examples.12.What is the finally block, and when do you use it?13.What is the difference between throw and throws?14.What is the use of this keyword?15.What is a thread, and how many ways can we create a thread?16.What is the use of start, wait, and sleep methods?17.What is the Collection interface?18.What is the difference between List and Set?19.Provide some scenario-based questions from Collections.20.Explain the equals and hashCode methods.21.What are Java 8 features?22.What is the difference between map and flatMap methods?23.How do you use the Optional class in Java?24.How do you create a database connection in Java?25.What is the difference between Statement and PreparedStatement?26.What is Hibernate?27.What is the difference between SQL, HQL, and JPQL?28.What is the Spring Framework?29.Explain IoC, MVC, and Spring Boot.30.Explain some Spring Boot annotations.31.What is a Bean? Explain the Bean lifecycle.32.What is AOP in Spring?33.What is the use of the @Entity annotation?34.What is the difference between WHERE and HAVING clauses?35.What is an inner join?36.What is Foreign key?

**Aniket Suryawanshi Aspire System L-1 16th Nov 2024Interviewer –** Nandhagopal Ramesh

1. Difference between JDK and JRE 2. Can we run a Java program without JDK?3. Explain the static keyword 4. Can we change the value of a static variable?5. Can we use a non-static method with the static keyword?6. Can we use non-static variables inside static methods?7. Syntax for using non-static variables inside static methods8. Definition of the final keyword in simpler terms9. Can we make a list as final in Java?10. Is addition and deletion possible in a final list?11. Abstract class vs Interface: When to use them (in table format)12. Can we create an object of an abstract class?13. Why does an abstract class have a constructor if it cannot be instantiated?14. Can an interface provide method implementations in Java?15. Write a function to find the maximum for each and every contiguous subarray of size k input : n=9, k=3 arr[] ={1,2,3,1,4,5,2,36} output : {3,3,4,5,5,5,6} in java16. Are you aware of Try with Resource and purposes?17. Can we write try without catch block?18. Differentiate between Throw and Throws keyword19. In client side what are the exceptions we need to handle?20. What are the exceptions commonly occur in client side?21. How would you show the exception to the users?22. Differentiate between Spring and spring boot23. Two beans are referring same type how do you resolve that?24. How do you use the values from properties file?25. How do you handle exception proper response in the application?26. Define ORM27. In MySQL and Hibernate ORM. We have used some traditional queries. Can you migrate without MySQL to Oracle? Do we need to do any modification in the code?28. Write the second maximum salary29. Difference between primary key and unique key30. What is the purpose of indexing?

**Muztaba Ahmad Aspire System L-1 16th Nov 2024Interviewer –** Arun Janardhan

1. Self- introduction
2. Difference between static and final keyword.
3. What is use of final keyword?
4. What is use of STREAM API?
5. Difference between spring and spring boot.
6. What is use of finally block?
7. Difference load and get method in hibernate.
8. Difference between map and filter map.
9. Difference between hibernate and JPA
10. Difference between @autowired and @qualifier in Spring?
11. What is the difference between constructor injection and setter injection?
12. Difference singleton vs prototype design pattern in Java?
13. How to implement a singleton class in Java?
14. Write a function to find the maximum for each and every contiguous subarray of size k. Input N=9,k=3={1,2,3,1,4,5,2,3,6}output: {3,3,4,5,5,5,6}

**Pramod Kumar V Aspire System L-2 16th Nov 2024Interviewer –** Arun Janardhan1.Self-Introducton 2.Tell me about your projects3. Explain Java 8 features4. Explain Microservices5. Explain JDK, JRE, JVM6. Differentiate between StringBuilder and String buffer7. Differentiate between classes and objects8. Explain OOPs concepts9. Explain Spring framework - all modules10.Explain spring beans - creation, management, who manages etc.11.Explain Hibernate 12. Explain the seven steps of JDBC 13. Explain exception handling14. Explain Spring MVC15. Explain SQL - inner join16.Collections - list, set, map and queue, what all of them do, why are they used?

**Bathala Malathi Aspire System L-1 16th Nov 2024**1. Introduce yourself2. Difference between Hibernate and Data JPA3. When do you use The @Entity and @Table?4. Explain me about entitymanagers5. Difference between arraylist and linkedlist6. @Entity @table Productid fetch type= lazy{ Storypoint store } When it is loaded if you mention Native Query and JPQL query?7. Where do we use @transactional?8. What is rollback mechanism?9. What are all the springboot annotations you know?10. Find the unique characters using the java 8 Input = "sinister"

**Keerthi P Aspire System L-1 15th Nov 2024**

1. Briefly tell me about yourself and your projects.
2. What is the difference between monolithic and microservices?
3. Explain the advantages of microservices over the monolithic.
4. What is RC intermediate in spring?
5. How do you create API’s?
6. Can we have more than one controller class?
7. How many objects will be created if 2 controllers are invoked at the same time and using same employee service?
8. What is IOC? Why do we need it? What is the advantage over new keyword?
9. How dependency is injected?
10. What is the use of @autowired?
11. Differentiate between spring bean and instance created using new keyword.
12. In which layer will we be using @transactional?
13. Can we use @transactional in controller layer?
14. Difference between arraylist and linked list
15. What is spring security? How do you implement it? Explain the flow
16. What is interface? Why do we need interface?
17. Explain Java 8 features and java 11 features
18. Explain streams, what is the advantage of using streams.? Features of stream
19. Why interface has default methods? What is default methods?
20. How to create custom immutable class?

**Pramod Kumar V Aspire System L-1 12th Nov 2024**Interviewer – Sreedharan Chandra1.Self-Introducton 2.Tell me about your projects3.Explain Java 8 and Java 11 features4.Explain Microservices5.Write REST API for saving Employee, exception handling, @Transactional, some scenarios based on this.6.Find the leaders in an array. The leader is an element which is greater than all the elements to the right side of it. (Use single loop)Input: A[] = [16,17,4,3,7,2]Output: [17,7,2]

**Manish Kumar Aspire System L-1 11th Nov 2024**1.Self-Introducton2.Tell me about your projects3.What is Microservice?4.Explain Java8 Features5.Why static and default method are in Interface?6.Write RestAPI for saving Employee7.What is the use of @Transactional annotation?8.Which java version are you using?9.Check if the string can become a palindrome by removing only one characterInput: "aebcbda" Output: false (removing e and d)Input: "abcbda" Output: true (removing d) using notepad

**Aniket Suryawanshi Aspire System L-2 09th Nov 2024** 1. What are the difficulties you have faced in your project? How did you solve it?2. Which database you have used for your project?3. Write a query using self-join.4. Employee table contains column as eid, ename, esal and deptid, write a query to display department wise percentage salary?5. What is singleton factory?6. How to communicate without blocking the thread in spring boot application without creating new thread? 7. Do you know what is Spring Webflux?8. Which technologies you have worked on other than java?9. Write the implementation for BST?

**Yeshwanthrao M G Aspire System L-2 09th Nov 2024**

1. Explain Spring Security in depth in detailed scenario based questions.
2. Describe the stack used by Spring Security.
3. Differentiate between Elastic Search and bolQueryBuilder
4. How does Spring Security integrate with banking APIs?
5. Explain Thread pool in JVM
6. Explain banking APIs in depth.
7. Describe the stack used in banking APIs.
8. Explain Apache Kafka in detail
9. Write a function that, for a list of integers, finds every subset of 3 elements, calculates the sum for each subset, and determines the largest sum.
10. Given an array of intervals where each interval is represented as [start, end], merge all overlapping intervals and return an array of the merged intervals.

**Bhagawat Bhavar Aspire System L-2 09th Nov 2024**

1. Given a string input, extract all possible substrings of the specified length. Count the number of vowels in each substring and find the substring with the maximum number of vowels. Return the substring and its vowel count.String s="hkhskdljdlksdklnskldskldksndsndjnsjdnlkjn";Will the same code work if I change the input and substring length?2. {2,3,5,67,4,3,2,3,2,3} Find duplicate element whose count more than 2**.**

**Darshan Wawale Aspire System L-2 09th Nov 2024**

1. Write a program to find the given string is anagram or not?i)->String str1= "listen";String str2= "silent";ii)->String st1= "SIVA";String st2= "SIVAS";
2. Given a string input, extract all possible substrings of the specified length. Count the number of vowels in each substring and find the substring with the maximum number of vowels. Return the substring and its vowel count.String input="leadingfintech";int substring= 3;Will the same code work if I change the input and substring length?
   1. SQL->There are two tables: Employee and Performance.**Employee table:**employee\_iddepartmentsalary**Performance table:**empId (foreign key)quarterratingetc.**Queries:**a. Write a query to find the departments with an average rating greater than 4.b. Write a query to fetch employees who have consistent performance, meaning their rating is above 4 in every quarter. Return only those employees whose performance rating exceeds 4 in all quarters.**Sivasakthivel K Aspire System L-2 09th Nov 2024**1. Explain your project.2. Have you worked on JDBC Template?3. Write a query using JDBC Template to fetch a list of user details and store them in a UserDTO class.4. Given two arrays, arr1 = {1, 8, 7, 9, 5, 6, 4} and arr2 = {7, 5, 6, 1, 12, 10, 1, 2}, write a program to output arr2 = {7, 5, 6}.5. Are you working with Spring Data JPA? Explain why we use Spring Data JPA.6. Write a query using Spring Data JPA: We have a User table and an Audit table. When a user enters the application, their login details are stored in the Audit table. Write a query for this.7. Write a query to fetch only user details from the User table.8. Write a query to fetch users whose login details are available in the Audit table.9. What is Spring Batch?10. What is ThreadPoolExecutor?11. Explain exception handling in Java.12. Given an input array arr1 = {1, 2, 3, 7, 9, 4, 5, 6, 8}, write a program to output arr2 = {7, 9, 4, 5, 6, 8, 1, 2, 3}.13. In a Spring Batch process, if we have 10 records and process1 handles 3 records, process2 handles 3 records, and process3 handles 3 records, what happens if process2 fails? How can we skip process2?14. Explain the complexities you faced in your project.15. Why do we use a ThreadPoolExecutor? What is its purpose?16. Write a program for merge sort.17. Given an input array arr1 = {1, 2, 3, 7, 9, 4, 5, 6, 8}, write a program to rotate arr1 until it matches arr2 = {7, 9, 4, 5, 6, 8, 1, 2, 3}. If no match is found, return -1.18. Where have you applied pagination? How did you implement it?19. Explain Apache Kafka. Why do we use it? Why are you using it in your project?20. If we pass param1(0, 5) and param2(1, 10) for pagination, how many records are fetched on each page? If some data is missing on the second page due to auto-fetching, how can we overcome this problem?21. Project related questions

**Aniket Suryawanshi Aspire System L-1 08th Nov 2024** Interviewer Name: Sreedharan Chandra

1. What is MongoDB?
2. Why do we need an interface in Java?
3. Interface doesn't have any implementation; then why do we need an interface?
4. Design an API to create an employee record.
5. Give me the service layer and repository layer for this.
6. Give controller layer also for the same.
7. Differentiate between RequestMapping and PostMapping
8. How many ways we can validate data in an API?
9. When does the employee service object get initialized?
10. What annotation is needed to create the object?
11. Explain Spring AOP and Spring Batch.
12. How to fetch products based on the brand name from the Product table?
13. Write a customized query for fetching products based on the brand name.
14. If I pass multiple brands, how will it work?
15. Same requirement using Java 8 features.
16. In the entity class, what is fetch type?
17. How does Set work to not allow duplicates?
18. If I create two employee objects, how will it work to not allow duplicates?
19. What is the use of the finally block in Java?
20. What is the difference between @Autowired and the new keyword?
21. How does @Autowired work and how does it prevent duplicates when using Set?

**Sivasakthivel K Aspire System L-1 06th Nov 2024** Interviewer Name: Sreedharan Chandra

1. Introduce yourself.
2. What are your roles and responsibilities? What tech stack do you know?
3. Explain Lambda expressions.
4. Explain Java 8 features in detail.
5. Why are default methods present in interfaces?
6. Given a list of employees, how would you remove duplicates and sort by salary? Explain your approach.
7. Find the leaders in an array. A leader is an element greater than all the elements to its right. (Use a single loop).Input: A [] = [16, 17, 4, 3, 7, 2]Output: [17, 7, 2]
8. Find the next immediate greatest element for all the elements in an array. If no greater element exists, add -1. Solve using a single loop.Input: [12, 4, 5, 6, 27, 9]Output: [27, 5, 6, 27, -1, -1]
9. How would you store multiple employee details, such as salary? How would you manage this for multiple transactions?
10. What is @Transactional in Spring?
11. What is a microservice?
12. What is an API Gateway?
13. How does communication happen between two microservices?
14. What is synchronous communication, and how can it be achieved?
15. What is Apache Kafka?

**Mohit Narkhede Aspire System L-2 28th Oct 2024**1. Introduction with Brief Description of Project2. What are Functional Interfaces?3. Whether these Functional interfaces are already used in Java? 4. Tell me everything you know about Java 85. Explain what feature you have developed using openAPI specifications?6. Design a program that manages a library's collection of books using multiple maps. Each map should represent a different genre (e.g., Fiction, Non-Fiction, Science). Implement functionality to add new books, retrieve books by genre, and handle situations where a genre does not exist or a book is not found. Ensure to incorporate proper error handling and meaningful messages for different error scenarios.

**Yeshwanthrao M G Aspire Systems L-1 04th Nov 2024** 1. Why is the main method static in Java?2. How do you call a static method from a different class?3. What is the difference between static and final in Java?4. If a list with two objects is declared as final, can we modify its contents?5. What is an interface in Java? Explain its features and in-depth concepts related to interfaces.6. How does loose coupling work with interfaces in Java?7. How can you remove duplicate keywords from an array in Java?8. Explain the internal working of HashSet.9. How does HashSet handle and remove duplicates?10. If two Employee objects with identical data are added to a HashSet, what will be the resulting size of the set?11. What is the purpose of the finally block in Java?12. Explain the @Autowired annotation and its behavior compared to using the new keyword for object creation.13. What is the difference between @PathVariable and @RequestParam in Spring?14. Given a list of products, write a method to filter out only the products with Samsung and Apple brands using Java Streams. Also, define a corresponding repository method.

**Darshan Wawale Aspire Systems L-1 05th Nov 2024**

1. Briefly introduce yourself with an overview of your projects.
2. You’re working in the banking domain, so how did you implement security in your project?
3. What is the security flow in your project?
4. Explain the concepts of authorization and authentication.
5. If you’re filling out a form and sending a request, but your token expires at that moment, how do you handle this?
6. Are you using a refresh token API from the backend, or how does it work?
7. What are the enhancements in Java 8?
8. What is an interface, and what is its purpose?
9. If both an interface and an abstract class have concrete methods, what is the difference between them?
10. How do you achieve loose coupling with interfaces?
11. Can you create an interface with implemented classes and explain loose coupling with a code example (e.g., on a notepad)?
12. Write code to sort a list of employees based on user input.
13. Describe how you handle exceptions in your projects.

**Paresh Kumar Giri Aspire Systems L-1 04th Nov 2024** 1. Introduce yourself and Tech Stacks that were you know?2. Do you know any AWS services and have knowledge on that?3. Which version have you used in your Projects?4. Explain me about Java 8 Features?5. What are the benefits of using Stream API?6. Tell me about operations in Stream API?7. In Interface what are default and static methods and what is the use of that?8. Can you explain how do you implement Custom Immutable class in java?9. Have you worked on Microservice Architecture?10. Why do we need API Gateway?11. Why do we need Eureka Server?12. In a Rest API how do you manage the transactions? What are the things you will use? 13. Where do you keep the @Transaction annotation? And Why don’t you keep this in @Controller Layer?14. Find the leaders in an array, The leader is an element which is greater than all the elements to the right side of it. (use Single loop)?Input: A [] = [16,17,4,3,7,2]Output: [17,7,2]**Bhagawat Bhavar ASPIRE SYSTEMS L1 29th Oct 2024**1. Difference between @PathVariable and @RequestParam. When to use @RequestParam and @PathVariable if both are fetching data from URL? 2. When do we create a bean using @Autowired and create an object using new keyword? Difference between them? What will happen, if created using new keyword? 3. Tell me about your recent project and your roles and responsibilities. 4. Write the code for an API which is creating an Employee record in DB 5. Suppose for an Employee class, we create 2 objects with same data and then add to HashSet. 6. What will be the size of Hashset? What is the relation between Hash code and Equals method? Implementation of the hash code method for custom class.7. Why we need Interface? What all Java 8 features are added for interface? 8. What is finally block? Alternative for finally block. 9. Find brand and color form DB create method in repo10. Explain Exception handling in spring boot11. As per user input how will you sort Employee object?12. Differentiate between == and equals

**Shashwat ASPIRE SYSTEMS L1 24th Oct 2024**1. Tell me about your recent project and your roles and responsibilities.2. Explain the use of API gateway.3. What are some of the ways to achieve inter-service communication.4. Difference between RestTemplate and FeignClient.5. When do we create a bean using @Autowired and create object using new keyword? Difference between them. What will happen, if created using new keyword?6. Write the code for an API which is creating an Employee record in DB7. Difference between @PathVariable and @RequestParam. When to use @RequestParam and @PathVariable if both are fetching data from URL?8. Difference between @PostMapping and @PutMapping. If instead of @PostMapping we use @PutMapping, will the API work? If yes, why not always use @PutMapping?9. Suppose for an Employee class, we create 2 objects with same data and then add to HashSet. What will be the size of Hashset? Relation between Hashcode and Equals method. Implementation of the hashcode method for custom class. 10. Given a list of products, filter the products whose brand is “Samsung” or “Apple” using streams. What if some products have brand name as null, what changes need to be done in the code? For the same, how to add method in repository layer? Write the SQL for this method. What if we have a list of brands and then we need to filter? 11. Why the main method is static?12. Why we need Interface? What all Java 8 features are added for interface?13. What is finally block? Alternative for finally block.14. How to do validation in spring project?15. How to remove duplicates from an Array?

**Ajith RG ASPIRE SYSTEMS L1 24th Oct 2024**1.Introduce yourself.2.Explain your project. How did you implement it?3.How do you give permission to a particular role?4.How do you configure two databases in your project, and how does it work?5.What is authentication and authorization?6.What is a microservice?7.How do you retrieve employees from two lists based on specific business logic (in this case, matching employee IDs) and handle potential exceptions (like null lists and missing employee IDs)?

**Mohit Narkhede ASPIRE SYSTEMS L1 24th Oct 2024**

1. Introduce Yourself
2. What are Microservices and why do we prefer them over Monolithic applications?
3. Can you explain Hashmap Concept?
4. What is API Gateway? What is the need of API Gateway?
5. Explain changes related to interfaces in Java 8

**Problems:**

1. Sort a map based on values using streams

2. int [] arr = {16,17,4,3,7,2};

Find a leader element from the above array. A leader is an element that is

greater than all the elements to its right. Use only single for loop.

**Nandagopal L-1**

1. Explain Sets
2. Explain HashMap
3. Differentiate between load & get in hibernate
4. Explain group by clause
5. Explain the concept of Strings
6. Explain the various type of design patterns
7. Explain the basics of OOPS
8. Describe the concept of Access Modifiers
9. Explain the types and the need for Exceptions
10. Explain Functional Interface
11. Explain Stream API
12. Self-introduction
13. What is the version of the Spring that you use?
14. WAJP to create map & sort the values
15. How is Equals associated with Hashcode?