

Core Java & Spring Interview Questions

Below are some FAQ's that a company usually expects from Fresher's? One should have a very strong understanding of the following questions, very well to prove your programming skills.

The following questions will not only provide you strong fundamental knowledge, but will also help you understand the technological stack and its purpose.

Q1 What is the difference between ArrayList and LinkedList in Java?

Q2: What is the purpose of the Map interface in Java Collections? And name few Map implementation classes .

Q3:What is the difference between HashMap and Hash Table in Java?

Q4. What is the purpose of the Comparable & Comparator interface in Java?

Q5 . What is the difference between JDK, JRE, and JVM?

Q6. What is the purpose of the Collections class in Java?

Q7. What is the difference between a class and an object in Java?

Q8. What is the difference between method overloading and method overriding?

Q9. What is the difference between static and non-static variables/methods?

Q10 . Why is the Java platform independent?

Q11. What is the difference between composition and inheritance?

Q12. What is the significance of the "this" keyword in Java?

Q13. What is an abstract class in Java , and in which scenario it would be used ?

Q14. What is the difference between String, StringBuilder, and StringBuffer?

Q15. What is the difference between the equals() method and the == operator when comparing strings?

Q16. What is the difference between the length() method and the size() method for strings?

Q17 . What are the differences between Stack and Heap Memory in Java?

Q18 . Question 29: How do you check if a string contains a specific substring in Java?

Q19. What is the difference between Thread and Runnable in Java?

Q20. What is the difference between start() and run() methods in Java?

Q21 . What is Data Encapsulation?

Q22.. What are the ways to synchronize threads in Java?

Q23. What is the purpose of the wait(), notify(), and notifyAll() methods in Java?

Q24. What is a deadlock in multithreading, and how can it be avoided?

Q25. What happens when the static keyword is not included in the main method signature?

A, Scenario A , during compile time

B. Scenario B , during runtime

Q26 . Does Finally block get executed if the code System.exit(0) is written at the end of Try block?

Q27. Explain the various interfaces used in the Collections framework?

Q28 What are the differences between Collection and Collections?

Q29 Explain the differences between a user thread and daemon thread.

Q30 Explain the meaning of deadlock

Q31 Explain the term thread pool , String Pool & Connection Pool

Q32 Can we start a thread twice?

Design Pattern

Q1 Describe the ways in which you can create a singleton pattern.

Q2. Explain Factory Design Pattern

Q3.What is the Purpose of Design Pattern.

Spring Interview Questions

Q1 Explain Dependency Injection and Service Locator patterns.

Q2 what is a Spring Framework?

Q3 what do you mean by Dependency Injection?

Q4 Explain Spring IOC Container.

Q5 In Spring Framework, how many modules are there? Name them.

Q6 Explain the different components of a spring application.

Q7In how many ways can you do a dependency injection?

Q8 Mention the differences between BeanFactory and ApplicationContext.

Q9 How does Spring Boot work?

Q10 What is the function of @SpringBootApplication internally?

Q11 Mention the purpose of using @ComponentScan in class files?

Q12 Explain starter dependencies.

Q13 What do you mean by MVC , what is the significance of it.

Q14 What is a RESTful API?

Q15 What will happen if you add Spring Security Starter Dependency in the application.

Q16. What is JWT approach of Session Management? or

- How can you handle authentication and authorization in a Spring Boot application?

Q17. Explain @Bean , @Configure , @Component & @ControllerAdvice dependencies.

Q18 .What is Maven and Gradle

Q19. What is mvn clean & mvn install command.

Q20 .What is the lifecycle of maven commands.

Q21. Difference between @Controller & @RestController.

Q22. What is CORS Policy

Q23. What is Entity Manager in JPA

Q24. What is Spring Data JPA , and why it is used.

Q25 . What is CRUDRepository and JpaRepository

Q26. Suppose we have Simple Employee Entity class , write few JPQL Query on that.

- a) Get All Employee
- b) Get All Employees based on ProjectName & Location.

Q27. What is Criteria API

Q28. How @Entity is different from @Table

Q29. What are the strategies used in Storing Entities in “is-a” relationship.

Q30. Which annotation used and how data will be stored in “Has-a” relationship

Q31. What is Sonar Qube

Q32. What is Swagger.

Q33. What is Docker

Q34. What is TDD approach.

Q35. What is H1 Database.