JAVA Interview Questions

Questions from Core Java

1. **What are the key concepts of OOPS.**
2. **What are the 3 main principles of Object Oriented Programming.**
3. **Explain polymorphism, method over loading and Method over riding.**
4. **What is Data Abstraction.**
5. **What is an Interface.**
6. **What is an Abstract Class.**
7. **\*\*\*What is the difference between Abstract class and Interface.**
8. **What are the real time applications of Interface and Abstract Class.**
9. **What is a Static modifier.**
10. **What is a Final keyword**
11. **What is the difference between final, finally and finalize keywords.**
12. **Talk about final keyword.**
13. **Can a try block exist without catch block ? Explain.**
14. **What is Exception Handling? What are checked and unchecked exceptions, give examples.**
15. **What are mutable and immutable objects, give examples and explain.**
16. **What are the advantages of String Buffer class.**
17. **What are the functionalities of JVM.**
18. **What is heap memory and Stack memory, give a brief talk about them.**
19. **Explain the memory allocation in Java, Explain Garbage Collection.**
20. **Explain the concept of Class loading.**
21. **What is the concept of Multi-Threading.**
22. **What are the practical uses of Synchronized keyword.**
23. **Explain class level lock and Method level lock.**
24. **Can multiple threads communicate with each other ? If yes, how ?**
25. **What is Deadlock ? Give real-time examples of it ? How can you come out of this state.**
26. **What is Race-condition ? Give Real-time examples of it ? How can you eradicate this.**
27. **Explain why main method should be public static and void.**
28. **Explain System.out.println**
29. **What are the different advancements in Java.**
30. **What are the modifications made in Java 1.7 to Java 1.8**
31. **What is a Collection API.**
32. **What are the differences between Array and List.**
33. **What are the differences between List and Map.**
34. **What are the differences between HashMap and HashSet.**
35. **Differences between all the different Collection objects.**
36. **Underlying data structures of all the Collection APIs.**
37. **What is the specialty of final keyword in collection API (final List ? )**
38. **What are Legacy classes.**
39. **What is the purpose of Serialization.**
40. **What are the different types of Iterators available.**
41. **What is the difference between JDK, JRE and JVM**
42. **Why Java ? Differences between Java platform and Other platforms.**
43. **Static keyword- What is difference between static (class) method and instance method**
44. **Can we overload main() method?**
45. **Can we override static method? -** [**https://www.javatpoint.com/method-overloading-in-java**](https://www.javatpoint.com/method-overloading-in-java)
46. **What is marker interface? - An interface that have no data member and method is known as a marker interface.For example Serializable, Cloneable etc.**
47. **What is static import ?**
48. **How many objects will be created in the following code? String s1="Welcome";   String s2="Welcome";  String s3="Welcome"; 🡪 one.**
49. **What is transient keyword?**
50. **Core Java Interview Questions -** [**https://www.javatpoint.com/corejava-interview-questions**](https://www.javatpoint.com/corejava-interview-questions)
51. **Follow the links to get more on different topics.**

Hibernate API

1. **What is the concept of ORM Tools.**
2. **What are the advantages of ORM tools over other Database connectivities.**
3. **What are the advantages of Hibernate API.**
4. **What is the difference between GET and LOAD methods.**
5. **What is the difference between update and merge method?**
6. **What is the difference between session.save() and session.persist() method?**
7. **What is HQL.**
8. **How do you filter data from Database using HQL.**
9. **Where do you give your database configurations – hibernate.cfg.xml**
10. **What is a dialect.**
11. **Explain Cache support in Hibernate.**
12. **What is the difference between first level cache and second level cache?**
13. **Explain Restrictions and Projections.**
14. **Different Stages of Object while working on ORM tools.**
15. **ORM Relations with 2 examples for each.**
16. **More:** [**https://www.javatpoint.com/hibernate-interview-questions**](https://www.javatpoint.com/hibernate-interview-questions)

Spring Framework

1. **What is Spring Framework.**
2. **What are the advantages of Spring Framework.**
3. **Speak about light-weightedness and loosely coupledness.**
4. **What is Dependency-injection and how can it be related to loosely-coupled framework- Runtime polymorphism.**
5. **What are the different ways of Dependency injection.**
6. **What is the difference between constructor injection and setter injection?**
7. **What is IOC,  What is the difference between BeanFactory and ApplicationContext?**
8. **What are the different design patterns you are aware of ?**
9. **What is Singleton design pattern and Factory class.**
10. **What are the different ways of achieving the singleton design.**
11. **What is MVC design?**
12. **What are the advantages of MVC Design pattern ?**
13. **Explain the request and responses process in Spring MVC pattern ?**
14. **What is a front controller ?**
15. **What are the advantages of Spring MVC over Servlets.**
16. **How will you connect Hibernate with Spring ? Can they be merged ?**
17. **What are the different handler mappings available in Spring MVC.**
18. **What are DAO classes ? Why do you use Interface – implementation model ?**
19. **What is @Controller annotation?**
20. **What is @RequestMapping annotation?**
21. **What is the ViewResolver class?**
22. **Which ViewResolver class is widely used?**
23. **Spring AOP Interview Questions**
24. **Spring JDBC Interview Questions.**
25. **More:** [**https://www.javatpoint.com/spring-interview-questions**](https://www.javatpoint.com/spring-interview-questions)

REST API

1. **What is a REST API ?**
2. **What are the advantages of REST API over SOAP ?**
3. **Why the name Representational State Transfer.**
4. **Different Http methods.**
5. **REST Process.**

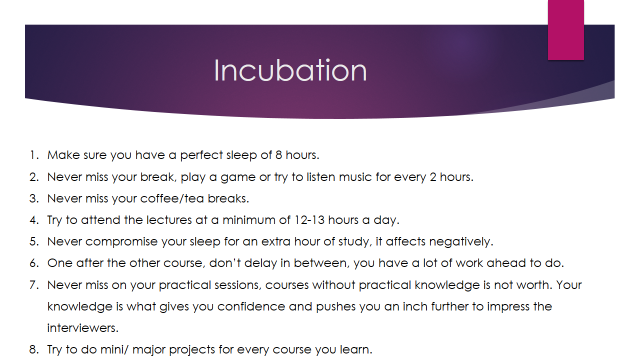
Servlets

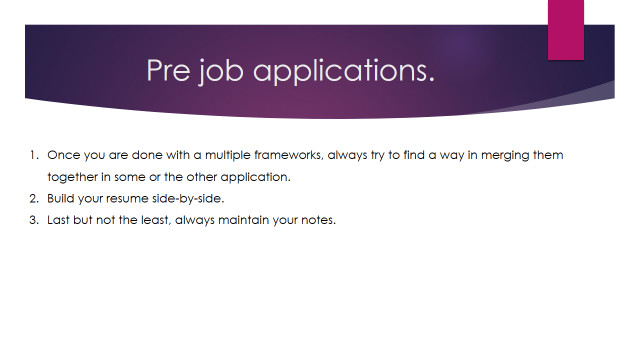
1. **What is a Servlet.**
2. **What are the different methods in a Servlet.**
3. **What is the life cycle of a servlet.**
4. **What is difference between ServletConfig and ServletContext?**
5. **What is Session Tracking?**
6. **Difference between forward() method and sendRedirect() method ?**
7. **What is the purpose of RequestDispatcher Interface?**
8. **What is difference between GenericServlet and HttpServlet?**
9. **What is difference between Get and Post method?**
10. **What is difference between Cookies and HttpSession?**
11. **What are the annotations used in Servlet ?**

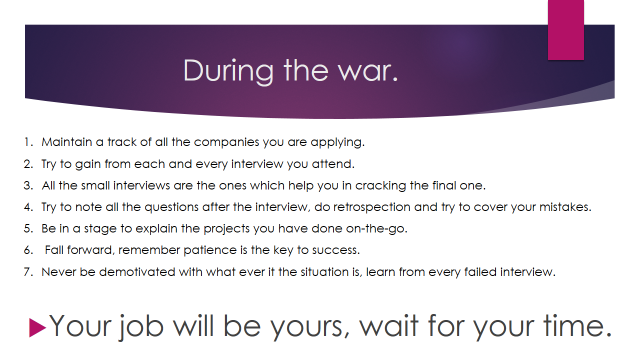
Database

1. **What are joins ? Define each of them.**
2. **What is a Stored Procedure.**
3. **How will you do the normalization operations.**
4. **SQL Injection and how can you escape ?**

****

****

****

****