**Web Services:**

1. How web service authentication work basic and Oath?
2. Diff b/w jax-rs and jax-ws?
3. What is wsdl ,how to generate classes/jar from wsdl?
4. Which is good soap vs rest?
5. [Source of questions](http://www.journaldev.com/9193/web-services-interview-questions-soap-restful)
   1. [What are the advantages of Web Services?](http://www.journaldev.com/9193/web-services-interview-questions-soap-restful#advantages-of-web-services)
   2. [What are different types of Web Services?](http://www.journaldev.com/9193/web-services-interview-questions-soap-restful#types-of-web-services)
   3. [What is SOAP?](http://www.journaldev.com/9193/web-services-interview-questions-soap-restful#soap-definition)
   4. [What are advantages of SOAP Web Services?](http://www.journaldev.com/9193/web-services-interview-questions-soap-restful#soap-advantages)
   5. [What are disadvantages of SOAP Web Services?](http://www.journaldev.com/9193/web-services-interview-questions-soap-restful#soap-disadvantages)
   6. [What is WSDL?](http://www.journaldev.com/9193/web-services-interview-questions-soap-restful#wsdl-definition)
   7. [What are different components of WSDL?](http://www.journaldev.com/9193/web-services-interview-questions-soap-restful#wsdl-components)
   8. [What is UDDI?](http://www.journaldev.com/9193/web-services-interview-questions-soap-restful#uddi-definition)
   9. [What is difference between Top Down and Bottom Up approach in SOAP Web Services?](http://www.journaldev.com/9193/web-services-interview-questions-soap-restful#soap-ws-approach)
   10. [What is REST Web Services?](http://www.journaldev.com/9193/web-services-interview-questions-soap-restful#rest-web-services)
   11. [What are advantages of REST web services?](http://www.journaldev.com/9193/web-services-interview-questions-soap-restful#rest-advantages)
   12. [What are disadvantages of REST web services?](http://www.journaldev.com/9193/web-services-interview-questions-soap-restful#rest-disadvantages)
   13. [What is a Resource in Restful web services?](http://www.journaldev.com/9193/web-services-interview-questions-soap-restful#restful-resource)
   14. [What are different HTTP Methods supported in Restful Web Services?](http://www.journaldev.com/9193/web-services-interview-questions-soap-restful#http-methods)
   15. [Compare SOAP and REST web services?](http://www.journaldev.com/9193/web-services-interview-questions-soap-restful#soap-vs-rest)
   16. [What are different ways to test web services?](http://www.journaldev.com/9193/web-services-interview-questions-soap-restful#web-services-testing)
   17. [Can we maintain user session in web services?](http://www.journaldev.com/9193/web-services-interview-questions-soap-restful#web-services-seesion)
   18. [What is difference between SOA and Web Services?](http://www.journaldev.com/9193/web-services-interview-questions-soap-restful#soa-vs-web-services)
   19. [What is the use of Accept and Content-Type Headers in HTTP Request?](http://www.journaldev.com/9193/web-services-interview-questions-soap-restful#http-request-headers)
   20. [How would you choose between SOAP and REST web services?](http://www.journaldev.com/9193/web-services-interview-questions-soap-restful#soap-rest-choice)
   21. [What is JAX-WS API?](http://www.journaldev.com/9193/web-services-interview-questions-soap-restful#jax-ws-api)
   22. [Name some frameworks in Java to implement SOAP web services?](http://www.journaldev.com/9193/web-services-interview-questions-soap-restful#java-soap-frameworks)
   23. [Name important annotations used in JAX-WS API?](http://www.journaldev.com/9193/web-services-interview-questions-soap-restful#jax-ws-annotations)
   24. [What is use of javax.xml.ws.Endpoint class?](http://www.journaldev.com/9193/web-services-interview-questions-soap-restful#jax-ws-endpoint)
   25. [What is the difference between RPC Style and Document Style SOAP web Services?](http://www.journaldev.com/9193/web-services-interview-questions-soap-restful#soap-rpc-vs-document)
   26. [How to get WSDL file of a SOAP web service?](http://www.journaldev.com/9193/web-services-interview-questions-soap-restful#soap-wsdl-url)
   27. [What is sun-jaxws.xml file?](http://www.journaldev.com/9193/web-services-interview-questions-soap-restful#soap-config-file)
   28. [What is JAX-RS API?](http://www.journaldev.com/9193/web-services-interview-questions-soap-restful#jax-rs-api)
   29. [Name some implementations of JAX-RS API?](http://www.journaldev.com/9193/web-services-interview-questions-soap-restful#jax-rs-implementations)
   30. [What is wsimport utility?](http://www.journaldev.com/9193/web-services-interview-questions-soap-restful#wsimport-utility)
   31. [Name important annotations used in JAX-RS API?](http://www.journaldev.com/9193/web-services-interview-questions-soap-restful#jax-rs-annotations)
   32. [What is the use of @XmlRootElement annotation?](http://www.journaldev.com/9193/web-services-interview-questions-soap-restful#xmlrootelement-jaxb)
   33. [How to set different status code in HTTP response?](http://www.journaldev.com/9193/web-services-interview-questions-soap-restful#http-response-code)

**Core Java:**

1. HashMap internally which data structure uses?

Ans :till JDK 1.6 linked list.

1. How to do deep cloning? Syrilizable interface
2. How to communicate b/w 2 process or socket programming?
3. How JVM works?
4. How many types of memory area in JVM?
5. What are class loaders available in java which one does what job?
6. What are garbage collections available and which one we should when?
7. What are different oops concepts?
8. What is use of generics?
9. Why wrapper classes required why wrapper/String class are immutable?
10. What you will write while handling Error.
11. OOPS Concepts?
12. Inheritance ?
13. Abstract class and interface which one should use when?
14. Overriding and overloading (how exception are thrown in overridden method).
15. What are list of method in object class each one’s usage?
16. String,StringBuffer ,StringBuilder.
17. Key methods of String class.
18. Write your custom api for Exception handling.
19. Serializable.
20. Wrapper classes and immutable objects ,singleton objects?
21. How hashCode() works what is best approach to override it what is the risk if it is not properly implemented.
22. Internal implementation of hashMap.

**Java 8:**

**JMS(ActiveMQ):**

**Multi-Threading and Concurrency:**

1. Write a code which will cause deadlock.
2. Wait , notify ,notify all (and why these methods are in object class)
3. Producer consumer problem.
4. What is raise condition.
5. Can we call non synchronized method (if a thread has acquired lock on another synchronized method of same class). Ans :No
6. Write a program for odd even problem.
7. How to kill thread in executor service.
8. Difference between Callable and Runnable.
9. What is benefit of using lock interface over synchronization.
10. Do we have synchronized set /arraylist?
11. What is concurrent hashmap.
12. Cyclic barrier
13. CountDownlatch
14. Executor framerwork/service.
15. Fork join framework.
16. BlockingQueue
17. How to create synchronized list /array or set?
18. How to create read only map?

**Spring:**

1. What is spring life-cycle?
2. What is DI and IOC
3. What is AOP? .have you worked on it?
4. How component mapping works?
5. What is Auto wiring?

**Hibernate :**

1. Diff b/w get and load?
2. What are 2nd level cache and how to configure it?
3. Different types of mappings (1-1 ,1-n ,n-n)
4. What are diff fetching strategies ?(join, select , subselect , fetch-size)
5. What is inverse concept how it works?
6. What are the main Interface available in hibernate ?
7. How configuration factory work and describe life cycle of configuration factory.
8. What are 3 state of session (attached, detached , transient).
9. What is Criteria Api.
10. What is inheritance Mapping how many types ?
11. What is association mapping how many types?
12. Collection mapping?

**Data Structure and Algorithms:**

1. Merge Sort , selection sort , bubble sort , quick sort ,insertion sort, heap sort , binary tree , binary search tree , balanced binary search tree , DFS , heap , min heap , max heap.

**Design & Patterns:**

1. Factory , Singleton,MVC , FrontController ,IOC, FixedSizePool , Proxy, Decorator , Observer , Adapter.
2. Design problems:

Design movie ticket booking schema , design bus ticket booking schema .design railway ticket booking schema.

1. UML Diagram , class diagram , Sequence diagram .

**Testing QA Questions:**

1. What is TDD ? why its important .
2. Why are test case you are covering .
3. What is blackbox testing and whitebox testing .
4. How are you covering regression testing .
5. Junit test case?
6. How are you maintaining coding and functional documentation.

**Programming:**

**SQL/NoSQL:**