1. SOLID principal. Which one is most important of them.
2. Diff betwen Abstraction and Encapsulation?
3. How to access private Methods/Variables?
4. Why string is immutable?
5. How to create Immutable objects?
6. Diff between Throw, Throws, Throwable?  
   **Note**: If we throw unchecked exception from a method, it is must to handle the exception or declare in throws clause.  
   **Note**:  If the superclass method does not declare an exception, subclass overridden method cannot declare the checked exception but it can declare unchecked exception.  
   **Note**: If the superclass method declares an exception, subclass overridden method can declare the same subclass exception or no exception but cannot declare parent exception
7. try without catch but with finally block?
8. what is exception propagation?
9. How many ways Thread can be created?
10. What is Thread Local? And its benefit?
11. What is class level lock and object level lock?
12. What is synchronization?
13. how do we do inter communication between 2 threads?
14. What are wrapper classes?
15. diff ArrayList vs LinkedList?
16. How HashMap works internally?
17. what are fail fast and fail safe iterators?
18. diff between comparator vs comparable?
19. diff HashMap vs ConcurrentHashMap?
20. CopyOnWriteArrayList() and CopyOnWriteArraySet()?
21. Diff between ConcurrentHashMap and SynchronizedHashMap?
22. what changes noticed in HashMap after Java8?
23. what is lazy initialization and eager initialization?
24. What is Equals and HashCode contract?
25. what happens when hash Collisions and how to overcome it?
26. How to make HashMap Synchronized?
27. how many ways object can be created

**Java 8:**

1. what is functional interface?
2. what is use of Lambda Expression?
3. What is the use of @FunctionalInterface?
4. what is diff between Collection and Streams?
5. Why streams are used?
6. Difference between stream and parallelStream?
7. Difference between map and flatMap in stream API?
8. What memory changes noticed in java8? (onPrem memory vs MetaSpace)?
9. what changes have been done in garbage collections from Java 8?
10. why do you need default and static method in interfaces?
11. what are terminal and intermediate operations?
12. what is use of Optional class? Optional.ofNullable(), isPresent(), ifPresent(), orElseThrow(), Optional.Of()?

**SpringBoot**:

1. WHat is Spring IOC?
2. what is dispatcher servlet?
3. What is Dependency Injection in Spring
4. What are the scopes of bean and how is it defined ?
5. Use of @Qualifier,@Primary, @SpringBootApplication, @Value,
6. what are stereotype Annotations and use of it.
7. diff between bean and component?
8. what all spring modules you have worked.?
9. How to handle transaction management in springboot?
10. How you will build and deploy the application automatically?
11. How you will create external configuration in springboot?
12. How can we exclude or include Auto-Configuration files in SpringBoot. Why is spring-boot opinionated?
13. How can we handle exception in Spring boot using try-catch and @ControllerAdvice  
    what is use of @ComponentScan annotation?
14. How you will exclude in built tomcat server to use Jetty Server in the application?
15. How you will make your API to act as asynchronous call?
16. which is better solution that to use .yml or .properties file?
17. How you will monitor your application? (Actuators)?
18. What happens when you use Put HttpMethod for updating?
19. How springboot works, like XML data, Json data, property files configuration, how these are getting converted to java code?
20. when you might get ResourseNotFoundException?
21. what are profiling in springboot?
22. how to configure actuator end point to use diff port number and why it is require to have diff port but not same as application port?
23. Statefull and staeless in RestApi.
24. What is API Gateway and how is it implemented in your project

**Microservices:**

1. What is service registry and discovery.
2. How you will manage your application when there is a more load.
3. There are "n" no.of instances and how you will handle that all the request re not coming to same microservice instance.
4. How you will communicate the data between multiple microservices?
5. Scenarios where you need synchronous communication and asynchronous communication in microservices.
6. How you will handle the Exceptions in microservices.
7. How you will handle load balancing
8. How you will secure your microservices application.
9. How to identify failure in multiple micro services and how to resolve ?
10. what are 12 factor Microservices application.
11. what are 15 factor Microservices application