Antra Mock Interview Questions

1. Java top questions:

2. Differences between interface and abstract class.
3. Differences between HashMap and ConcurrentHashMap
4. Differences between Array and ArrayList
5. Differences between ArrayList and linkedList
6. Differences between set and map
7. Differences between == and equals()
8. Differences between String, StringBuilder and StringBuffer
9. Differences between Runnable and Callable.
10. Differences between final vs finally vs finalize.
11. Differences between overriding and overloading
12. Differences between Future and CompletableFuture.
13. Differences between process and thread
14. Difference between sleep() and wait()
15. equals() vs hashcode
16. Difference between static and non-static
17. Difference between comparator and comparable
18. Differences between stream and collection in java 8
19. What is OOP? Do you know inheritance, encapsulation, polymorphism, abstraction
20. What are access modifiers?
21. What are Java collections?
22. What is an immutable class? Why is Java String immutable?
23. What is the SOLID principal?
24. What are types of exceptions? Checked and unchecked
25. What is executor service? Why do we use it?
26. What is Serialization in java?
27. What is the thread life cycle?
28. To create threads, how many, and where
29. What is synchronization?
30. What is wait() and notify()?
31. What is join()?

32. What is transient?
33. What is volatile?
34. What are the new features in java 8?
35. What is the stream api in java 8? Pros and cons
36. What is the lambda expression in java 8? Pros and cons
37. What is the functional interface annotation in java 8?
38. How do you handle exceptions in java?
39. How does HashMap work in java?
40. How does concurrent hashmap work
41. How does optimistic lock work
42. What does exclusive lock do
43. How gc work
44. Comparator vs comparable
45. What is thread local
46. Throw vs throws
47. How to handle exception in java

Spring

1. the Spring framework vs Spring Boot
2. Spring actuator
3. What is DI, what is IOC, what is AOP
4. Joinpoint, point cut
5. What is bean injection? What are diff
6. What is bean life cycle
7. What are components in spring servlet, what is spring servlet
8. BeanFactory vs ApplicationContext?
9. What are bean scopes? Which one is default.
10. Autowireda vs qualifier
11. What is @SpringBootApplication?
12. @Component, @Repository & @Service annotations in Spring?
13. Difference between @Controller and @RestController
14. @RequestBody vs. @ResponseBody
15. @PathVariable vs. @RequestParam
16. @transactional
17. What is circular dependency
18. What are different kinds of http methods -> what is http codes

1. Follow up: Difference between POST vs PUT vs PATCH

19. Describe the RESTful principles.
20. Talk about Spring Security
21. What is jwt
22. How did you do testing
23. What is tdd
24. JDBC vs hibernate
25. Beanfactory vs factory bean
26. Async annotation
27.

TESTING

28. What is unit testing vs integration testing?
29. What do you use for testing? (Mockito)
30. doAnswer vs mockito
31. TDD
32. What is spy
33. Testing experiences
34. have you used @ParameterizedTest, and how to use it
35. How to test backed api
36. What is mock
37. How to create clean test code/ good test code
38. What test did you do in your last project
39. How to test application without code

Spring security

1. how do you do security
2. where did you and how did you store password
3. how does JWT work
4. how did you impl spring security
5. why security context
6. if we have different authentication ways, how do you implement them
7. but if we use providers manager it will loop through them all the time, anyway to speed up process
8. how do you configure spring security
9. how to configure filter in spring security
10. how do you verify roles of different user
11. Explain the difference between authentication and authorization.
12. What are the core components of Spring Security?
13. How do you implement security in a Spring Boot application?
14. How do you define custom user details in Spring Security?
15. Explain the role of the AuthenticationManager in Spring Security.

16. How can you restrict access to methods using Spring Security?
17. How do you secure REST APIs using Spring Security?
18. What is the SecurityContextHolder?
19. How can you integrate OAuth2 with Spring Security?
20. What is the purpose of UserDetailsService in Spring Security?

CICD

1. What is your Pipeline?

GIT/GITHUB

1. Git merge strategy
2. Git fetch vs git pull
3. Git pull vs git pull –rebase
4. Git add vs git commit
5. Git stash

Design Patterns

1. What design patterns have you used?
2. What is the Singleton Design Pattern?
3. How to create a singleton? (eager initialization and lazy initialization) Please provide an implementation.
4. Is Singleton thread safe?
5. How to make singleton thread safe? (for both eager and lazy)
6. How to prevent Singleton Pattern from Reflection, Serialization and Cloning?
7. What is the factory design pattern? Why do we use factories? How do you use this design pattern in your application?
8. Provide a code example for factory design pattern
9. Difference between factory vs. abstract factory design pattern

10. Provide a code example for builder design pattern
11. Explain the API gateway design pattern
12. Explain the circuit breaker design pattern
13. Explain proxy design pattern
14. Explain Observer design pattern
15. Explain Chain of Responsibility design pattern

BQ

1. The most challenging problems in your recent project you solved
2. Introduce yourself and project
3. What do you see in next five years
4. What is your team size
5. How do you scale your java, sql, spring skills
6. What are your responsibilities
7. Weakness and strength
8.