===========TCS Lead Engineer (8 Years of exp)===========================

1. Explain the scenario where you need to use AWS?
2. In Java 8 what is CompletableFuture?
3. How CompletableFuture is different from Future which we use in multithreading?
4. In Java 8 functional interfaces what’s the use of default and static methods?
5. Explain the scenario where you must use FlatMap?
6. Method names of sequential streams and parallel streams?
7. In Java 8 interface, is there a risk of diamond problem because of default methods?
8. What is Lambda expression?
9. What’s the use of method references?
10. SOLID design principles with examples
11. What is the objective of Garbage collection?
12. Why synchronization is necessary in multithreading?
13. Lock on object vs lock on class
14. How many ways we can break the singleton pattern?
15. What is TreeMap? And internal sorting algorithm?
16. Equals and HashCode methods of HashMap
17. What is Executor framework?
18. How to make the class immutable?
19. Difference between deep copy and shallow copy?
20. What’s the use of the clone method? Why do we have to use it?
21. How to configure JPA?
22. Can we write custom query in JPA?
23. What are profiles in REST?
24. What is query hint?
25. How to make your own annotation?
26. What are the list of attributes we have in annotation?
27. How to create a custom actuator?
28. Can you explain SpringBootApplication annotation?

===========Capita (5.5 Years of exp)===========================

1. What are OOPs concepts?
2. What is data hiding? Follow up question of Abstraction
3. Why String is immutable?
4. How to make a class immutable?
5. In the Employee class get the employee names who has joined after a particular date. Return a HashMap where the key is employee name and the address
6. Map vs FlatMap?
7. If I want to use Employee as a key to the HashMap what are the changes I need to do in Employee class?
8. What will happen if you don’t override the HashCode method and override only the equals() method?
9. LinkedList vs ArrayList?
10. List vs Set?
11. How to preserve insertion order in Set?
12. Comparator vs comparable?
13. In a list of employees can we sort the employee based on id and name both?
14. How to create checked exceptions? How?
15. Reversing a string from a given index

===========Capgemini (8 Years of exp Java Tech Lead) ========================

1. What are the new features in Java 8?
2. What is the advantage of Lambda expressions? Why improve?
3. What are the advantages of functional programming?
4. What are the advantages of functional interfaces?
5. What is immutable? Advantages and disadvantages? How to create an immutable class?
6. How to create a singleton?
7. How to create custom exception and what is the exception hierarchy?
8. What is try with resources in Java 7?
9. Comparable vs comparator?
10. What are the different types of Autowiring?
11. What is a qualifier?
12. What are things to consider while creating REST APIs?
13. How to version REST APIs?
14. Difference between PATCH, PUT and POST methods?
15. How to manage many to many/one to one associations etc.?
16. What is an actuator?
17. What is profiling and how does it work?
18. What is CI/CD?
19. What are the different design patterns that you have worked on?
20. What security mechanism you are using and authentication mechanism?
21. What is OAUTH2 and JWT?
22. Have you come across any performance issues in your project?
23. Can you explain TDD?