**Interviews Questions**

1. Explain JDK/JRE/JVM in Detail

2. Bean scope in Spring Java.

3. Difference between `Comparable` and `Comparator`.

4. Marker interface.

5. Why multiple inheritance is not allowed in Java.

6. How a garbage collector works (give explanation using heap memory).

7. How many threads can update in `ConcurrentHashMap` simultaneously.

8. Qualifier annotation in Spring.

9. Difference in static and non-static synchronized methods and whether the lock will be on the class or the method if calling a non-static method of a different class.

10. If two values are equal using the `equals` method, will their hashcode be the same?

11. What is an immutable class?

12. Lambda functions.

13. Static and default methods in interfaces in Java.

14. PUT and POST request difference and describe PUT, POST, GET, DELETE requests.

15. Heap memory.

16. Dependency injection.

17. How does `Concurrent HashMap` use synchronization and how does it make groups (on which criteria) inside it to put locks?

18. Java 8 functionalities use.

19. Why can't we use the GET method over the POST method to save employee data?

20. Is multiple inheritance one reason why Java is not 100% object-oriented? If yes, how?

21. When do we prefer `ExecutorService` over `Thread` or `Runnable`?

22. A task is running in a separate thread. How can we stop the task if it exceeds 10 minutes?

23. Implement producer and consumer using `wait` and `notify`.

24. You have threads T1, T2, and T3. How will you ensure that thread T2 runs after T1 and thread T3 runs after T2?

25. If a database table has a `name` and `id` column, write a query to find even rows.

26. How can you prevent cyclic dependency in Spring?

27. Why do we use the Builder design pattern instead of constructor-based object creation?

28. Name the algorithm used by `Arrays.sort(..)` and `Collections.sort(..)`.

29. Find the Nth salary in a given map. Only a Java 8 Stream solution will be accepted.