**Senior java programmer interview questions**

**Microservices :**

1. **What is microservices?**
2. **Microservices vs Monolithic**
3. **Can we create microservice without registry server?**
4. **How to handle distributed transactions across microservices ? (Two phase commit protocol)**
5. **What are all the design patterns used in micorservices?**
6. **How to scale microserives? (Docker swrm or Kubernetes)**
7. **What is circuit breaker?**
8. **Rest Template vs Feign client**

**Spring boot :**

1. **What is @transaction ?**
2. **Can we use @transaction in private method?**
3. **Check how we can use @transaction in class level?**
4. **Transaction isolation level?**
5. **Transaction propagations?**
6. **@component vs @service**
7. **JpaRepository v CrudRepository**
8. **Caching techniques**
9. **Different types of cache providers? (Ehcache,redis)**
10. **@Rest Controller vs @controller**
11. **How to build rest api with Criteria query and different predicates?**
12. **Yaml and its benefits over properties file?**

**Core Java (version 8)**

1. **What is functional interface?**
2. **Why we need @functional interface annotation?**
3. **What is the purpose of having default method in functional interface?**
4. **What is the difference between FI and Abstract class in java 8?**
5. **When we will pick abstract class over interface?**
6. **What are functional interface available in java 8?**
7. **What is lambda?**
8. **How to handle exception in lamda?**
9. **Permgen is replaced by meta space in java 8 (Run through java 8 feature)**
10. **What is stream api?**
11. **Terminal vs intermittent operations (some companies asking us to write a code using streams and lamdas)**
12. **Map vs Flatmap**
13. **Parallel streams**
14. **Hash map changes java 8**
15. **What is Collison in hash implementations?**
16. **What is unmodifiable list? Learning overall collection mechanism will help**
17. **Synchronized block vs Synchronized method**
18. **Design patterns experience**
19. **Real time example for singleton class**
20. **How to create reflection proof singleton class**
21. **Different types of singleton (Lazy,Eager,Synchronized,Bill Pugh)**
22. **Purpose of having atomic integer**
23. **String deduplication in java 8**
24. **Why we need marker interface and its internal mechanism?**
25. **Can we create custom marker interfaces?**
26. **What is annotation in java? (sample @override)**
27. **What is nashHorn ? (java script engine)**
28. **What is fork and join framework?**
29. **Cn we run any other thread before main() ?**