Java : Core Java, Why are strings Immutable, Basic Data Structures, Scenario based question which database to use in which case

How are HashMaps implemented in Java, How is conflict resolution done for hashMaps, What is LoadFactor , How are Priority Queues implemented in Java.

Complexities of Different data Structures, (HashMaps, Stacks,PriorityQueues, BinaryTrees), Access modifiers, JVM,Java Memory model, Types of classLoaders in Java. Difference between NoClassDefFound and ClassNotFound Exceptions. Types of Garbage collectors in Java. Features of Java 8 and why are they added in Java. Exceptions in Java.

DataBase : Difference between SQL and noSQL Databases, Uses of these Databases. Basic operations on SQL (Delete,truncate,drop etc) , and basic queries using joins, aggregate functions. How does foreingnKeys implemented in noSQL databases, What is SQLInjection, Difference between clustered and non-clustered Indexes, Basic Normalization(1NF , 2NF etc)

Spring Questions : Bean scopes, Singleton and prototype beans, hibernate basics, Stateful and stateless transactions, circuit breaker and service discovery, difference between annotations(@bean,@configuration,@service,@controller etc.), Spring Actuator, Spring security, difference between PUT and PATCh etc. Microservices concepts

Object Oriented Design : Factory , Singlton, AbstractFactory, Decorator, Chain of Responsibility , builder ,Iterator , Strategy design Pattern etc and where they are adopted in Java. Basic concepts of OOPs(Aggregation, Inheritance etc)

Multithreading: Difference between hashtable,Hashmap and concurrentHashMap. ConcurrentModificationException. Syncronization,Locking strategies, What is reentrant Locks, ReadWriteLocks, Semaphores,

ForkJoinPool, Executor threads, Blocking queue, concurrentMaps, CountDownLatch,CycleBarrier, Callable,

Programming Questions :

Write program to create deadlock between two threads

Write Program to print even and odd numbers alternatively by two threads(1,2,3,,4 …) or print tik-tok indefinitely by two threads (tik-tok-tik-tok…)

Data Structure : 1. How To Merge two sorted Linked List

2. For a input stream of indefinite Strings, how can we process each String efficiently, Which data structure should be used for storing these strings

3. Basic algos for data structure traversal (DFS,BFS,Binary Search, Divide and Conquer) etc

4. Examples where these data structure are used. Etc.

Programming : Medium Complexity LeetCode questions :

How to implement stack methods (push,pull,pop and getMin()) in O(1) time Complexity

Find MinSum elements in any array in O(n) complexity

Add two numbers Stored in LinkedList and return resultant LinkedList

Linked List Reversal etc.

Cloud: Difference between IaaS, PaaS, Saas etc. What is Openshift, Docker, Kubernetes (only basics)

[wait(), notify() And notifyAll() Methods in Java - KnpCode](https://knpcode.com/java/multi-threading/wait-notify-notifyall-methods-in-java/#:~:text=wait%20%28%29%2C%20notify%20%28%29%20And%20notifyAll%20%28%29%20Methods,...%205%20Java%20wait%2C%20notify%2C%20notifyAll%20example.%20)