Java Collection Interview Questions For Developers.  
Q-1: What is the use of Java Collections Framework?  
Q-2: What are the main benefits of Java Collections Framework?  
Q-3: What is the structure of Java Collections Framework?  
Q-4: What is the difference between Collection and Collections Framework?  
Q-5: What is the difference between Collection and Collections?  
Q-6: What is the root interface in the collection hierarchy?  
Q-7: What are the primary interfaces in the Java Collections Framework?  
Q-8: Which are the collection classes that are synchronized or thread-safe?  
Q-9: What is the primary difference between List and Set?  
Q-10: What is the principal difference between Map and Set?  
Q-11: Which are the classes that implement List and Set interface?  
Q-12: What is an Iterator in the Java Collections Framework?  
Q-13: What are the principal differences between Iterator and Enumeration?  
Q-14: What is the design pattern that Iterator uses?  
Q-15: What are the methods to override for you to use any object as a key in HashMap?  
Q-16: What is the main difference between Queue and Stack?  
Q-17: What is the best way to reverse a List in Collections?  
Q-18: Which approach would you choose to convert the array of strings into the list?  
Q-19: Iterator doesn’t have a method to get next element. Can you explain why?  
Q-20: What is the difference between the Iterator and ListIterator?  
Q-21: What is iterator’s fail-fast property?  
Q-22: What is the difference between Fail-fast and Fail-safe?  
Q-23: What are the different ways to sort a list of Objects?  
Q-24: How does HashMap work in Java?  
Q-25: What is the difference between HashMap and Hashtable?  
Q-26: Why Map interface doesn’t extend Collection interface?  
Q-27: What is the use of Properties class?  
Q-28: How to remove the redundant elements from an ArrayList object?

1) What is CopyOnWriteArrayList, how it is different than ArrayList and Vector?  
2) Why ListIterator has add() method but Iterator doesn't or Why add() method is declared in ListIterator and not on Iterator.  
3) Can we replace Hashtable with ConcurrentHashMap?  
4) What is navigational Map?  
5) How does LinkedList is implemented in Java, is it a Singly LinkedList or Doubly LinkedList?  
6) Which one you will prefer between Array and ArrayList for Storing object and why? (Generics, dynamic growing )  
7) What is BlockingQueue, how it is different than other collection classes( flow control)  
8) How do you iterator over Synchronized HashMap, do you need to lock iteration and why ?  
9) When does ConcurrentModificationException occur on iteration?  
10) What is Deque? when do you use it ?  
11) Difference between Set, List and Map Collection classes?  
12) How does HashSet is implemented in Java, How does it uses Hashing ?

13) How do you iterator over Synchronized HashMap, do you need to lock iteration and why ?  
14) What is Deque? when do you use it ?

15)ArrayList vs CopyOnwriteArrayList

**CONCURRENTHASHMAP**What is ConcurrentHashMap in Java? (answer)  
is ConcurrentHashMap thread-safe in Java? (answer)  
How does ConcurrentHashMap achieve thread-safety? (answer)  
Can multiple threads read from ConcurrentHashMap same time? (answer)  
How does ConcurrentHashMap work internally? (answer)  
How do you atomically update a value in ConcurrentHashMap? (answer)  
How do you remove a mapping while iterating over ConcurrentHashMap? (answer)  
Does Iterator of ConcurrentHashMap is fail-safe or fail-fast? (answer)  
What will happen if you add a new mapping in ConcurrentHashMap while one thread is iterating over it? (answer)  
How you will design a good key for HashMap?  
Difference between HashMap and ConcurrentHashMap?  
Difference between HashMap and Collections.synchronizedMap(HashMap)?  
Difference between ConcurrentHashMap and Collections.synchronizedMap(HashMap)?  
Difference between HashMap and HashTable?  
Difference between HashTable and Collections.synchronized(HashMap)?  
Impact of random/fixed hashCode() value for key?  
Using HashMap in non-synchronized code in multi-threaded application?

Difference between ConcurrentHashMap and **Collections**.**synchronizedMap**(Map)?

**NEED TO ADD QNS ON priority queue,array deque**

**Lab Question:**

**Modify the Employee class created earlier such as to accept multiple employee details and store all employee objects in a HashMap. The functionalities need to be implemented are:**

**i) Add employee details to HashMap.**

**ii) Accept insurance scheme from user and display employee details based on Insurance scheme**

**iii) Delete an employee details from map.**

**iv) Sort the employee details based on salary and display it.**