

Java Collections Interview Questions & Answers

1. List vs Set

List maintains order and allows duplicates.

Set does not allow duplicates and usually unordered.

2. ArrayList vs LinkedList

ArrayList is fast for access, LinkedList is fast for insertion/deletion.

3. HashMap Internal Working

Uses hashing, buckets, and handles collisions using linked list or tree.

4. equals() & hashCode()

Used together to maintain uniqueness in HashMap/HashSet.

5. ConcurrentHashMap

Thread-safe without full locking, high performance.

6. Fail-Fast vs Fail-Safe

Fail-fast throws exception on modification, Fail-safe works on copy.

7. TreeSet vs HashSet

TreeSet sorted but slower, HashSet faster but unordered.

8. Map vs Collection

Collection stores values, Map stores key-value pairs.

9. Why Map is not Collection

Because Map represents key-value relationship, not single elements.

10. When to use LinkedHashMap

When insertion order or access order (LRU Cache) is needed.