**Concurrent Collection– Part\_10**

* **CopyOnWriteArrayList:**

1. Insertion order is preserved.
2. Heterogenous objects are allowed.
3. Duplicate objects are allowed.
4. Null insertion is possible.
5. Implements Serializable, Cloneable, RandomAccess.
6. CopyOnWriteArrayList Iterator is fail-safe, so we won’t get ConcurrentModificationException. But normal ArrayList is fail-fast, we will get ConcurrentModificationException.
7. With ArrayList we can remove an object from the list while iterating, but we can’t do the same in CopyOnWriteArrayList as it will create inconsistency in the time of sych with original list. If we try to do we will get runtime exception saying UnsupportedOperationException.

Example:

Iterator itr = l.iterator();

while(itr.hasNext()){

Integer I = (Integer) itr.next();

if(I % 2 == 0){

itr.remove(); // Line-1

}

}

With CopyOnWriteArrayList we will get UnsupportedOperationException at Line-1