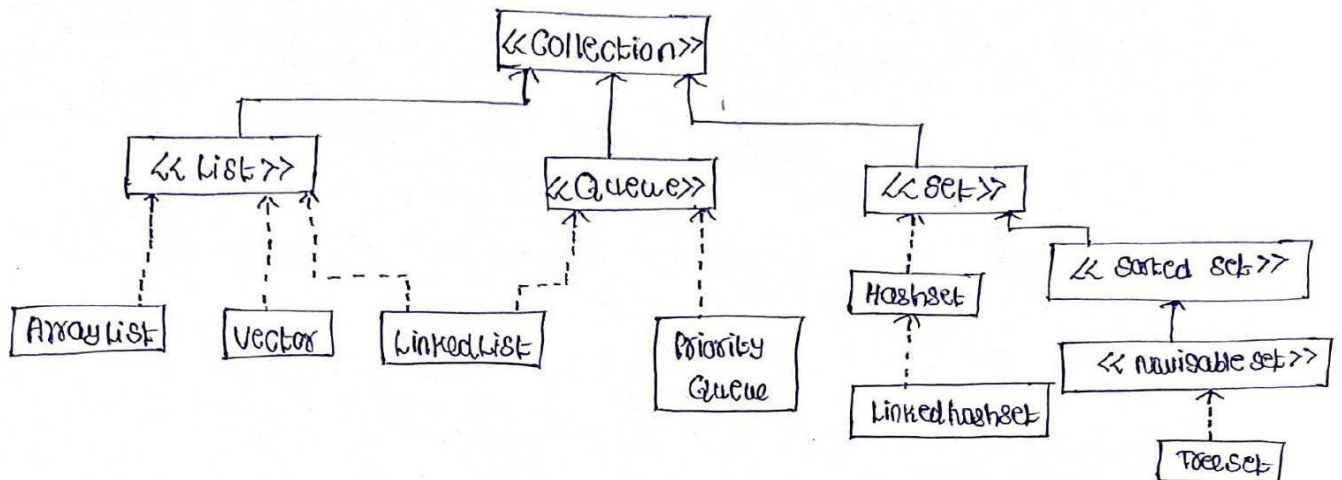


1.)

Array	Collection
1. Array size is fixed.	1. Collection size is dynamic.
2. Array can hold only homogeneous elements.	2. Collection can hold both homogeneous and heterogeneous elements.
3. No inbuilt methods available for search and sort operation.	3. Inbuilt methods available.
4. Array give you only one data structure.	4. Collection has multiple data structure.
5. Elements cannot be removed in array.	5. Elements can be removed and modified in collection.
6. Array doesnot allow null value.	6. Collection allow null value.
7. Array can hold primitive data and object.	7. Collection can hold only objects.

2.)



3.)

ArrayList	Vector
1. ArrayList is not legacy class.(from version 1.2)	1. Vector is legacy class.(from version 1.0)
2. ArrayList is not assynchronized	2. Vector is synchronized
3. ArrayList is not thread safe.	3. Vector is thread safe.

4.)

ArrayList	LinkedList
1. ArrayList implements List Interface	1. LinkedList implements List Interface and Queue Interface
2. ArrayList uses resizable array data structure	2. LinkedList uses doubly linked list data Structures
3. ArrayList implements three marker interfaces 1)Serilizable 2)Cloneable 3)Random access	3. Linked List implements two marker interface 1)serilizable 2)cloneable
4. ArayList is preferred for storing and retrieving data	4. LinkedList is preferred for manipulating data

5.)

Iterator	ListIterator
1. Iterator is an interface which helps to fetch data.	1. ListIterator is an interface that extends Iterator.
2. Iterator can traverse elements in forward direction only.	2. ListIterator can traverse elements in both forward and backward direction.
3. Iterator prints from first to last	3. ListIterator prints for any specified location.
4. Iterator can be used in List,Set,Queue	4. ListIterator can be used in List only.

6.)

List	Set
1. All the elements will have index	1. Objects in set will not have index
2. List will allow duplicate Objects	2. Set will not allow duplicate Objects
3. Null values are allowed	3. Null value is allowed only once
4. List interface is implemented by three class 1)ArrayList 2)LinkedList 3)Vector	4. Set interface is implemented by three class 1)HashSet 2)LinkedHashset 3)TreeSet
5. List is an ordered sequence	5. Set is an unordered sequence

7.)

HashSet	TreeSet
1. HashSet is implemented by using hash table data structure	1. TreeSet is implemented by using balanced tree data structure
2. HashSet does not maintain any order	2. TreeSet maintain in sorted order
3. Allow null objects	3. Doesnot allow null objects
4. equals() is used to compare objects	4. compare() is used to compare objects
5. Does not allow heterogeneous objects	5. Allow heterogeneous objects

8.)

HashSet	HashMap
1. HashSet implement Set interface	1. HashMap implements Map interface
2. In HashSet, values are stored as single value	2. In HashMap, values are stored as key value pair.
3. Does not allow duplicate values	3. Duplicate values are allowed but duplicate keys are not allowed

4. Single null value is allowed	4. Single null key and any number of null values are allowed
5. add() method is used for insertion	5. put() is used for insertion

9.)

HashMap	HashTable
1. HashMap is not synchronized and it is not thread safe	1. HashTable is synchronized and it is thread safe
2. It is not legacy class	2. It is legacy class
3. It allow single null key and multiple null values	3. It does not allow null value or key
4. HashMap is faster because it cannot be shared with multiple threads	4. HashTable is slower because it can be shared with multiple threads

10.)

Comparable	Comparator
1. It is single sorting sequence(sort based on single element)	1. It is multiple sorting sequence(sort based on multiple element)
2. Present in java.lang package	2. Present in java.util package
3. It has compareTo() method to sort	3. It has compare() method to sort

11)

To synchronise the list we can use synchroniseList() method in java, As well as used in synchronise set, map in synchroniseset() and synchronisemap().

12.)

If we made any modification in collection by using iterator at that time jvm throws Concurrent Modification Exception. This is called fail-fast.

13.)

Array	ArrayList
1. Does not accept null value	1. Accept null value
2. Values Cannot be removed	2. Values Can be removed
3. Fixed length data structure	3. Variable length data structure
4. Array can hold primitive data and object.	4. ArrayList can hold only objects.
5. Assignment operator is used to add elements	5. add() method is used to add elements