JDK 1.2V onwards :
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* In JDK 1.2 the entire collection framework is divided into Layerd Architecture.[Reverse Engineering]

  Layer 1 : All the interfaces [Full Abstraction]
  Layer 2 : All the abstract classes [Partial Abstraction]
  Layer 3 : All the concrete classes [No Abstraction]

Collection Hierarchy :

Points to remember :

Collection :
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* Collection is the root interface for all the collection classes and collection sub interfaces.

Iterable :
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java.lang.Iterable is used to provide iterarating facility and support various methods for iteration.

List interafce :
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* List interface is the sub interface of Collection. It follows **index and can accept duplicate elements.**

Set interface :
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* Set interface is the sub interafce of Collection. It follows **hashing technique** (does not follow index) and accepts only **unique elements.**

Queue interface :
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* It is the sub interface of Collection. It follows FIFO (First In First Out) order.

Iterator interface :
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* It is a cursor and used to read the data in forward direction only.

ListIterator interface :
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* It is also a cursor and used to read the data in forward and backward direction.

Collections class :
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* It is a predefined utility class available in java.util package from JDK 1.2V. It contains a private constructor and all the methods are static methods.

Methods of Collection interafce :

a) public boolean add(E element) :- It is used to add an item/element in the in the collection.

b) public boolean addAll(Collection c) :- It is used to insert the specified collection elements in the existing collection(For merging the Collection)

c) public boolean retainAll(Collection c) :- It is used to retain all the elements from existing element. (Common Element)

d) public boolean removeAll(Collection c) :- It is used to delete all the elements from the existing collection.

e) public boolean remove(Object element) :- It is used to delete an element from the collection based on the object.

f) public int size() :- It is used to find out the size of the Collection [Total number of elements available]

g) public void clear() :- It is used to clear all the elements at once from the Collection.

h) default boolean removeIf(Predicate<T> p) :- It will remove
the elements from the Collection based on boolean expression
using Predicate.

i) public boolean contains(Object obj) : used to search an Object in the given collection.

All the above methods of Collection interface will be applicable to all the sub interfaces like List, Set and Queue.