B1. How do you initialize an ArrayList?

ArrayList<String> list = **new** ArrayList<String>();

B2. What is Java Collections Framework?

The Collection in Java is a framework that provides an architecture to store and manipulate the group of objects. ... Java Collection framework provides many interfaces (Set, List, Queue, Deque) and classes (ArrayList, Vector, LinkedList, PriorityQueue, HashSet, LinkedHashSet, TreeSet).

B3. What is the difference between List and Set?

Difference between List and Set in Java. List is a type of ordered collection that maintains the elements in insertion order while Set is a type of unordered collection so elements are not maintained any order. List allows duplicates while Set doesn't allow duplicate elements .

B4. What is the difference between Map and Set?

The main difference between List and Set interface in Java is that List allows duplicates while Set doesn't allow duplicates. All implementation of Set honor this contract. While a Map holds two objects per Entry e.g. a key and a value and It may contain duplicate values but keys are always unique.

B5. What are the classes that implements List and Set interface?

They are Second top level interface of java collection framework.

**List**

In Java 1.8 they are implemented by

* ArrayList
* LinkedList
* Any custom implementation
* Any implementation by extending first two classes

There are some abstract classes which implement and provide abstracted implementation.

* AbstractList
* AbstractSequentialList

**Set**

* HashSet
* TreeSet
* AbstractSet

B6. What is an iterator?

An iterator is an interface that is used in place of Enumerations in the Java Collection Framework. Moreover, an iterator differs from the enumerations in two ways: Iterator permits the caller to remove the given elements from the specified collection during the iteration of the elements.

B7. What is the difference between Iterator and Enumeration?

Both iterator and enumeration are used to retrieve the data, the difference is that enumeration can be used only for legacy classes i.e vector/stack whereas iterators can be used for the rest. Enumeration can also be used for the key set in maps.

B8. What is the difference between HashMap and Hashtable?

Hashmap vs Hashtable

It is not-thread safe and can't be shared between many threads without proper synchronization code whereas Hashtable is synchronized. It is thread-safe and can be shared with many threads. 2. HashMap allows one null key and multiple null values whereas Hashtable doesn't allow any null key or value.

B9. What is the difference between Iterator and ListIterator?

The basic difference between Iterator and ListIterator is that both being cursor, Iterator can traverse elements in a collection only in forward direction. On the other hand, the ListIterator can traverse in both forward and backward directions. ... But, by using ListIterator you can add elements to a collection

B10. What is the difference between Array and ArrayList in Java?

An array is basic functionality provided by Java. ArrayList is part of collection framework in Java. Therefore array members are accessed using [], while ArrayList has a set of methods to access elements and modify them. Array is a fixed size data structure while ArrayList is not

B11. List the differences between LinkedList and ArrayList in Java.

* 1. **ArrayList** internally uses a dynamic array to store the elements. **LinkedList** internally uses a doubly **linked list** to store the elements.
  2. Manipulation with **ArrayList** is slow because it internally uses an array. If any element is removed from the array, all the bits are shifted in memory.

B12. Difference between Comparable and Comparator interface.

Comparable is used to compare itself by using with another object. Comparator is used to compare two datatypes are objects. If you see then logical difference between these two is Comparator in Java compare two objects provided to him, while Comparable interface compares "this" reference with the object specified.