**ASSIGNMENT 5**

1.Predefined Functions in Collections?

* addAll() - It is used to adds all of the specified elements to the specified collection.
* asLifoQueue() - It returns a view of a Deque as a Last-in-first-out (LIFO) Queue.
* binarySearch() - It searches the list for the specified object and returns their position in a sorted list.
* checkedCollection() - It is used to returns a dynamically typesafe view of the specified collection.
* checkedList() - It is used to returns a dynamically typesafe view of the specified list.
* checkedMap() - It is used to returns a dynamically typesafe view of the specified map.
* fill() - It is used to replace all of the elements of the specified list with the specified elements.
* frequency() - It is used to get the number of elements in the specified collection equal to the specified object.
* emptySortedSet() - It is used to get the sorted set that has no elements.
* checkedQueue() - It is used to returns a dynamically typesafe view of the specified queue.
* copy() - It is used to copy all the elements from one list into another list.
* disjoint() - It returns true if the two specified collections have no elements in common.

2. Underlying ds for linked list and arraylist?

Both ArrayList and LinkedList are two different implementations of the List interface.

3. Advantages and disadvantages of array list?

Some advantages of arraylist are: -

* You can define ArrayList as re-sizable array. Size of the ArrayList is not fixed. ArrayList can grow and shrink dynamically.
* Elements can be inserted at or deleted from a particular position.
* ArrayList class has many methods to manipulate the stored objects.
* If generics are not used, ArrayList can hold any type of objects.
* You can traverse an ArrayList in both the directions – forward and backward using ListIterator.
* ArrayList can hold multiple null elements.
* ArrayList can hold duplicate elements.

Some disadvantages are: -

* A possible disadvantage of ArrayList is that it holds only object types and not primitive types (eg, int ). To use a primitive type in an ArrayList, put it inside an object or use of the wrapper classes (eg, Integer, Double, Character.).

4. what are iterator and cursors in java?

Iterator is an interface available in Collection framework in java. util package. It is a Java Cursor used to iterate a collection of objects. It is used to traverse a collection object element one by one.

5. What are list Iterator, Enumerator?

* ListIterator is one of the four java cursors. It is a java iterator which is used to traverse all types of lists including ArrayList, Vector, LinkedList, Stack etc.
* The enumeration () is a method of Java Collections class which is used to get the enumeration over the specified collection.