

# Understanding List Interface

- The Java.util.List is a child interface of Collection.
- A List is an ordered Collection of elements in which insertion order is preserved.
- Lists allows duplicate elements.

## ArrayList :

- ArrayList is available since jdk1.2V
- It allows duplicates & insertion order is maintained.
- Default capacity when creating an ArrayList is 10.
- If the ArrayList is full then its capacity will be increased automatically.

New capacity=(current capacity\*3/2)+1

- It is not synchronized by default.

```
ArrayList al=new ArrayList();
```

```
List al=collections.synchronizedList(al);
```

Process to make  
ArrayList Synchronized

To overcome the problems of "TypeCasting" & "Type-Safety" in collections, "**GENERIC**S" have been introduced from jdk1.5v.

# ArrayList Class Methods:

Method	Description
boolean add (element obj)	This method appends the specified element to the end of the ArrayList. Returns true if succeeded
void add(int position,element obj)	inserts the specified element at the specified position in the ArrayList
element remove(int position)	removes the element at the specified position in the ArrayList and returns it
boolean remove (Object obj)	This method removes the first occurrence of the specified element obj from the ArrayList, if it is present.
int size ()	Returns number of elements in the ArrayList.
element get (int position)	returns the element available at the specified position in the ArrayList.