ArrayList: Java Collections Framework Tutorial Part 2

<https://www.youtube.com/watch?v=Plob9dBGyEY>

int a[]=new int[3];---static array

a[0]=10;

a[1]=20;

a[2]=30;

a[3]=40;--it will show an error index out of bound exception

here problem is size is fix so we can not add elements more that size.

to resolve this problem we use dynamic array---ArrayList

ArrayList

if you add elements automatically size will increase

**package** Collec;

**import** java.util.ArrayList;

**public** **class** ArrayList\_demo {

**public** **static** **void** main(String[] args) {

ArrayList<Integer> ar=**new** ArrayList<Integer>();

/\*array list is dynamic array list

properties:

1. It will allow duplicates

2. it will follow insertion order

3. Not synchronized

4. it will allow random access since elements are stored in index

\*/

ar.add(10);//0

ar.add(20);//1

ar.add(30);//2

//to get size of array list

System.***out***.println(ar.size());

ar.add(40);//3

ar.add(40);//4

ar.add(50);//5

//to get size of array list

System.***out***.println(ar.size());

//to get the particular value based on index

System.***out***.println(ar.get(3));

//if you want to print all the value of the any list will use for loop

//because in array all the values will be stored in the form of index,

//so using for loop you can print one by one

**for** (**int** i = 0; i < ar.size(); i++) {

System.***out***.println(ar.get(i));

}

}

}

Generic and non- generic

**Before jdk 1.5 will followed non generic**

NON-Generic

ArrayList ar=**new** ArrayList();

Declaring array with all data types data like integer string

You can add all types of data into array like integer string

ar.add(10);---integer

ar.add(“Mouni”);---String

ar.add(‘c’);--char

ar.add(true);--boolean

**after jdk 1.5 we are following generic**

Generic

ArrayList<Integer> ar=**new** ArrayList<Integer>();

Declaring array with particular data like integer string

You should add only integers into array

ar.add(10);

ar.add(20);

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

Declaring array with particular data like integer string

You should add only integers into array

ar.add(“Mounika”);

ar.add(“Chitra”);

employee table:

in one class you have to declare employee details

**package** Collec;

**public** **class** Employee {

String gobalname;

**int** gobalage;

String gobaldept;

//contructor

Employee(String localname,**int** localage, String localdept) {

**this**.gobalname=localname;

**this**.gobalage=localage;

**this**.gobaldept=localdept;

}

}

In ArrayList class you have to create object of that employee details

Employee e1= **new** Employee("Mounika",24,"QA");

Employee e2= **new** Employee("Mouni",25,"dev");

Employee e3= **new** Employee("Chitra",27,"admin");

ArrayList<Employee> ar\_E=**new** ArrayList<Employee>();

ar\_E.add(e1);

ar\_E.add(e2);

ar\_E.add(e3);

Iterator<Employee> iterator = ar\_E.iterator();

**while**(iterator.hasNext())

{

Employee emp=iterator.next();

System.***out***.println(emp.gobalname);

System.***out***.println(emp.gobalage);

System.***out***.println(emp.gobaldept);

}

**package** Collec;

**import** java.util.ArrayList;

**import** java.util.Iterator;

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System.***out***.println(emp.gobaldept);

}

}

}

3

6

40

10

20

30

40

40

50

Mounika

24

QA

Mouni

25

dev

Chitra

27

admin