```java
//copy one arraylist into another arraylist.

package com.arraylist;

import java.util.ArrayList;
import java.util.Iterator;

public class ArrayListDemo1 {

	public static void main(String[] args) {

		ArrayList<Integer> al = new ArrayList<Integer>();
		al.add(10); // 0th index
		al.add(20); // 1st index
		al.add(30); // 2nd index

		ArrayList<Integer> al2 = new ArrayList<Integer>();
		al2.add(40); // 0th index
		al2.add(50); // 1st index
		al2.add(60); // 2nd index

		al.addAll(al2);
		System.out.println("copy arraylist is=" + al);

		Iterator<Integer> itr = al.iterator();
		while (itr.hasNext()) {
			System.out.println(itr.next());
		}
	}
}
```

```
>>
copy arraylist is=[10, 20, 30, 40, 50, 60]
10
20
30
40
50
60
--------------------------------------------------------------------------------
```

```java
//Design the generic arraylist for Integer type only
package com.arraylist;

import java.util.ArrayList;
public class ArrayListDemo2 {

	public static void main(String[] args) {

		ArrayList<Integer> al= new ArrayList<Integer>();
		al.add(10);
		al.add(20);
		al.add(30);

		for(int i: al) {
			System.out.println(""+i);
		}
	}
}
```

```
>>
10
20
30
```

```java
//Design the generic arraylist for String type only
package com.arraylist;

import java.util.ArrayList;
public class ArrayListDemo3 {
1
public static void main(String[] args) {

		ArrayList<String> al= new ArrayList<String>();
		al.add("10");
		al.add("20");
		al.add("30");

		for(String str: al) {
			System.out.println(""+str);
		}
```

```
	}
}
>>
10
20
30
```

```
//program for demonstrate the arraylist method
package com.arraylist;

import java.util.ArrayList;
public class ArrayListDemo4 {

	public static void main(String[] args) {

		ArrayList al= new ArrayList();
		al.add(10);
		al.add(20);
		al.add(50);
		al.add(2,75);
		System.out.println("size of list is="+al.size());
		System.out.println("List="+al);
		System.out.println(al.contains(80));
	}
}
>>
size of list is=4
List=[10, 20, 75, 50]
false
```

```
//how to sort arraylist


package com.arraylist;

import java.util.ArrayList;
import java.util.Collections;

public class ArrayListDemo6 {
```

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

		ArrayList<String> al= new ArrayList<String>();
		al.add("shubham");
		al.add("rahul");
		al.add("laxman");
		al.add("snehal");
		al.add("kshitija");
		al.add("yogesh");
		al.add("piyush");
		al.add("pushkar");
		al.add("ajay");

		Collections.sort(al);

		System.out.println(al);
	}
}
>>
[ajay, kshitija, laxman, piyush, pushkar, rahul, shubham, snehal, yogesh]
```

```
//merge two arraylist into one arraylist


package com.arraylist;

import java.util.ArrayList;

public class ArrayListDemo7 {

	public static void main(String[] args) {

		ArrayList<Integer> al=new ArrayList<Integer>();
		al.add(10);
		al.add(20);
		al.add(30);

		ArrayList<Integer> al1=new ArrayList<Integer>();
```

```
		al1.add(40);
		al1.add(50);
		al1.add(60);

		ArrayList<Integer> al2=new ArrayList<Integer>();
		al2.addAll(al);
		al2.addAll(al1);
		System.out.println("Merge list element is>>"+al2);

	}
}
>>
Merge list element is>>[10, 20, 30, 40, 50, 60]
```

//create the arraylist for user defined type for employee

```
package com.arraylist;

import java.util.*;
public class ArrayListDemo8 {

	public static void main(String[] args) {

		ArrayList<Employee> arrayList = new ArrayList<Employee>();

		arrayList.add(new Employee(20, "ram", "25000"));
		arrayList.add(new Employee(30, "sohan", "15000"));

//by using iterator
		Iterator<Employee> itr = arrayList.iterator();

		while (itr.hasNext()) {
			System.out.println("employee list>>" + itr.next());
		}

//by using for each loop
for(Employee e1: arrayList) {
			System.out.println("data is>>"+e1);
```

```
            }

        }
}
```

```
package com.arraylist;

public class Employee {

        // id, name, salary.

        int id;
        String name;
        String salary;

        public Employee(int id, String name, String salary) {
                super();
                this.id = id;
                this.name = name;
                this.salary = salary;
        }

        public int getId() {
                return id;
        }

        public void setId(int id) {
                this.id = id;
        }

        public String getName() {
                return name;
        }

        public void setName(String name) {
                this.name = name;
        }

        public String getSalary() {
```

```
		return salary;
	}

	public void setSalary(String salary) {
		this.salary = salary;
	}

	@Override
	public String toString() {
		return "Employee [id=" + id + ", name=" + name + ", salary=" +
salary + "]";
	}

}
>>
employee list>>Employee [id=20, name=ram, salary=25000]
employee list>>Employee [id=30, name=sohan, salary=15000]

---------------------------------------------------------------------------

// Design the method to return the list of Employees in arraylist.

public class TestMain {

public List<Employee> getEmployeeList() {

		List<Employee> list = new ArrayList<Employee>();
		list.add(new Employee(11,"Rahul", "pune"));
		list.add(new Employee(21,"Ram", "mumbai"));
		return list;
	}

public static void main(String[] args) {
			TestMain tm=new TestMain();
			System.out.println(tm.getEmployeeList());
		}

	}
```

>>

[Employee [id=11, name=Rahul, salary=pune], Employee [id=21, name=Ram, salary=mumbai]]

//Design the method to return arraylist to method

```
package com.arraylist;

import java.util.ArrayList;

/*
 * public Employee addEmployee(){
 *
 *    Employee emp= new Employee();
 *    return emp;
 * }
 */
public class EmployeeList {

        public ArrayList getEmployeedata() {

                ArrayList arrayList= new ArrayList();
                arrayList.add(10);
                arrayList.add(20);
                arrayList.add(30);
                return arrayList;
        }
}
```

```
package com.arraylist;

import java.util.ArrayList;

/*how insert the elements into list for type string and integer and iterate
 * by using for each loop
 * */
public class ArrayListDemo4 {
```

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

		ArrayList arrayList= new ArrayList();

		arrayList.add(50);
		arrayList.add(10);
		arrayList.add("ram");

		for(Object o: arrayList) {
			System.out.println(o);
		}

	}
}
>>
50
10
ram
---------------------------------------------------------------------------------------
//Using Lambda Function to Iterate
import java.util.ArrayList;

public class ArrayListDemo {

	public static void main(String[] args) {

				ArrayList<String> list = new ArrayList<String>();
				list.add("pune");
				list.add("mumbai");
				list.add("bangalore");
				list.forEach(arrayList                                    ->
System.out.println(arrayList));
	}

}
>>>
pune
mumbai
bangalore
```