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Collection Program

1)Collection List:

```
package com.collectionlist.demo;

import java.util.ArrayList;
import java.util.List;

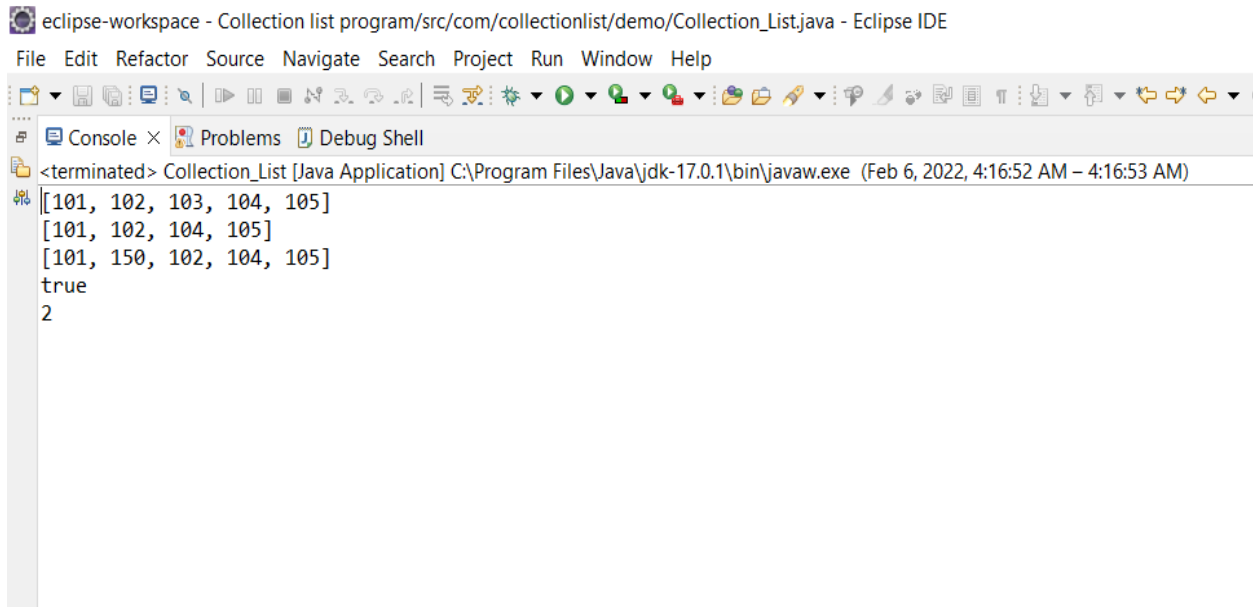
public class Collection_List {

    public static void main(String[] args) {
        List<Integer>list=new ArrayList<Integer>();
        list.add(101);
        list.add(102);
        list.add(103);
        list.add(104);
        list.add(105);
        System.out.println(list);
        list.remove(2);
        System.out.println(list);
        list.add(1,150);
        System.out.println(list);
        System.out.println(list.contains(104));
        System.out.println(list.indexOf(102));

    }

}
```

Output:

A screenshot of the Eclipse IDE interface. The title bar reads 'eclipse-workspace - Collection list program/src/com/collectionlist/demo/Collection_List.java - Eclipse IDE'. The menu bar includes 'File', 'Edit', 'Refactor', 'Source', 'Navigate', 'Search', 'Project', 'Run', 'Window', and 'Help'. The toolbar contains various icons for file operations, editing, and debugging. The 'Console' tab is active, showing the following output: '<terminated> Collection_List [Java Application] C:\Program Files\Java\jdk-17.0.1\bin\javaw.exe (Feb 6, 2022, 4:16:52 AM - 4:16:53 AM)' followed by four lines of array outputs: '[101, 102, 103, 104, 105]', '[101, 102, 104, 105]', '[101, 150, 102, 104, 105]', 'true', and '2'.

```
eclipse-workspace - Collection list program/src/com/collectionlist/demo/Collection_List.java - Eclipse IDE
File Edit Refactor Source Navigate Search Project Run Window Help
<terminated> Collection_List [Java Application] C:\Program Files\Java\jdk-17.0.1\bin\javaw.exe (Feb 6, 2022, 4:16:52 AM - 4:16:53 AM)
[101, 102, 103, 104, 105]
[101, 102, 104, 105]
[101, 150, 102, 104, 105]
true
2
```

2. Collection Add List PGM

Employee Class

```
public class Employee {
    private int empid;
    private String empName;
    private float empSal;
    public int getEmpid()
    {
        return empid;
    }
    public void setEmpid(int empid) {
        this.empid=empid;
    }
    public String getEmpName() {
        return empName;
    }
    public void setEmpName( String empName) {
        this.empName = empName;
    }
    public float getEmpSal() {
        return empSal;
    }
}
```

```

}
public Employee(int empid,String empName,float empSal) {
super();
this.empid=empid;
this.empName=empName;
this.empSal=empSal;

}
public String toString()
{
return "EmployeeArrayList[empid="+empid+",empName="+empName+",
empsal="+empSal+"]";
}
}

```

EmployeeListDemo.Main.class

```

import java.util.ArrayList;
import java.util.Collections;
import java.util.Iterator;
import java.util.List;

public class EmployeeListDemo {

public static void main(String[] args) {
// TODO Auto-generated method stub
List<Employee>employee=new ArrayList<Employee>();
Employee Emp=new Employee(101,"Aaj",2020.80f);
employee.add(Emp);
employee.add(new Employee(103,"Rohan",20256.f));
employee.add(new Employee(105,"Renu",20258.f));
employee.add(new Employee(104,"Neha",20456.f));
employee.add(new Employee(102,"Zombie",20956.f));
System.out.println(employee);
Iterator it=employee.iterator();
while(it.hasNext()) {
Employee emp=(Employee)it.next();
System.out.println(emp.getEmpid()+"\t"+emp.getEmpName()+"\t"+emp.getEmpSal());
}
ArrayList<String>al=new ArrayList<String>();
for(int i=0;i<employee.size();i++) {
Employee emp= employee.get(i);
String name=emp.getEmpName();
al.add(name);
}
}

```

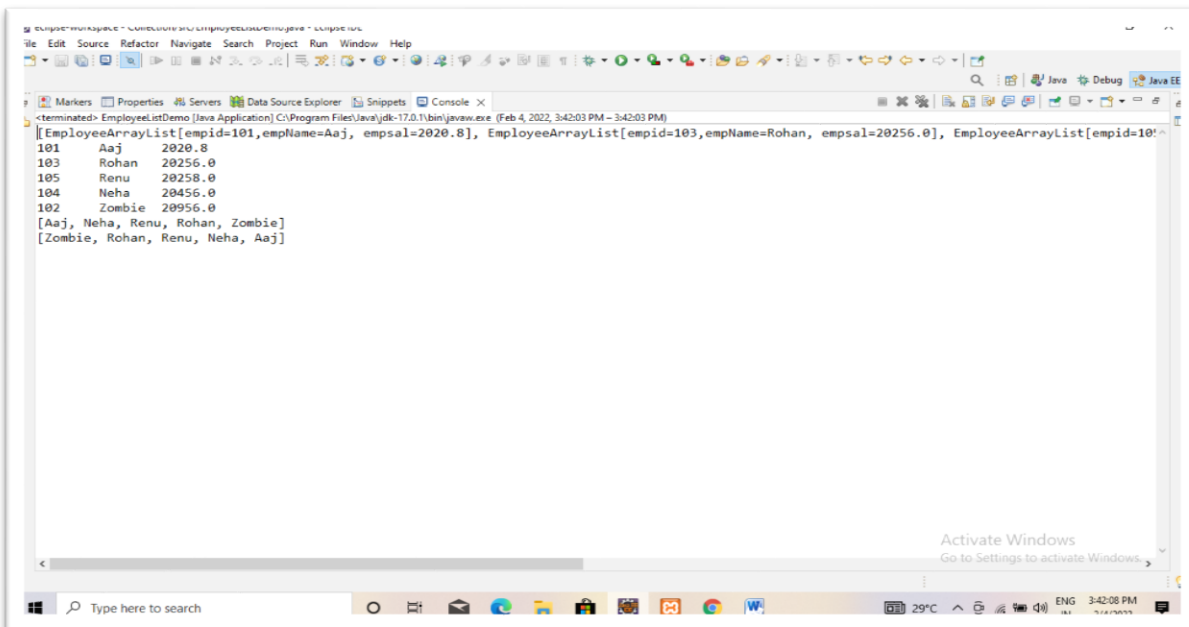
```

}
Collections.sort(al);
System.out.println(al);
Collections.reverse(al);
System.out.println(al);
}

}

```

Output



3. Collection Queue.

```
package com.collection.employeeelist;
```

```
import java.util.ArrayDeque;
```

```

public class DemoQueue {
    public static void main(String[] args) {
        ArrayDeque<String> arrayDeque = new ArrayDeque<String>();
        arrayDeque.push("Ajay");
        arrayDeque.push("Akash");
        arrayDeque.push("Rahul");
        arrayDeque.push("Ram");
    }
}

```

```
System.out.println(arrayDeque);  
arrayDeque.pop();  
System.out.println(arrayDeque);  
arrayDeque.pop();  
System.out.println(arrayDeque);  
  
}  
  
}
```

Output:

