Design Pattern Lab (20CP210P)
Assignment 8

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Class Main

```java
public class Main
{
    public static void main (String[] args)
    {
        Driver d1 = new Driver(100, "Ram bhai", "Pro Driver");
        Driver d2 = new Driver(101, "Shyam bhai", "noob Driver");
        Directory driverDirectory = new Directory();
        driverDirectory.addEmployee(d1);
        driverDirectory.addEmployee(d2);

        Conductor con1 = new Conductor(200, "Suresh bhai", "day
Conductor");
        Conductor man2 = new Conductor(201, "Ramesh bhai ", "night
Conductor");

        Directory conDirectory = new Directory();
        conDirectory.addEmployee(con1);
        conDirectory.addEmployee(man2);

        Directory directory = new Directory();
        directory.addEmployee(driverDirectory);
        directory.addEmployee(conDirectory);
        directory.showEmployeeDetails();
    }
}
```

Interface Employee

```java
public interface Employee
{
    public void showEmployeeDetails();
}
```

Class Driver

```java
public class Driver implements  Employee {
    private String name;
    private long empId;
    private String position;

    @Override
    public void showEmployeeDetails() {
        System.out.println(empId+" " +name);
    }

    public Driver (long empId, String name, String position)
    {
        this.empId = empId;
        this.name = name;
        this.position = position;
    }

}
```

Class Conductor

```java
public class Conductor implements Employee {

    private String name;
    private long empId;
    private String position;

    @Override
    public void showEmployeeDetails() {
        System.out.println(empId+" " +name);
    }

    public Conductor (long empId, String name, String position)
        {
            this.empId = empId;
            this.name = name;
            this.position = position;
        }

}
```

Class Directory

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

    public class Directory implements Employee
    {
        private List<Employee> employeeList = new ArrayList<Employee>();

        @Override
        public void showEmployeeDetails()
        {
            for(Employee emp:employeeList)
            {
                emp.showEmployeeDetails();
            }
        }

        public void addEmployee(Employee emp)
        {
            employeeList.add(emp);
        }

        public void removeEmployee(Employee emp)
        {
            employeeList.remove(emp);
        }
    }
```
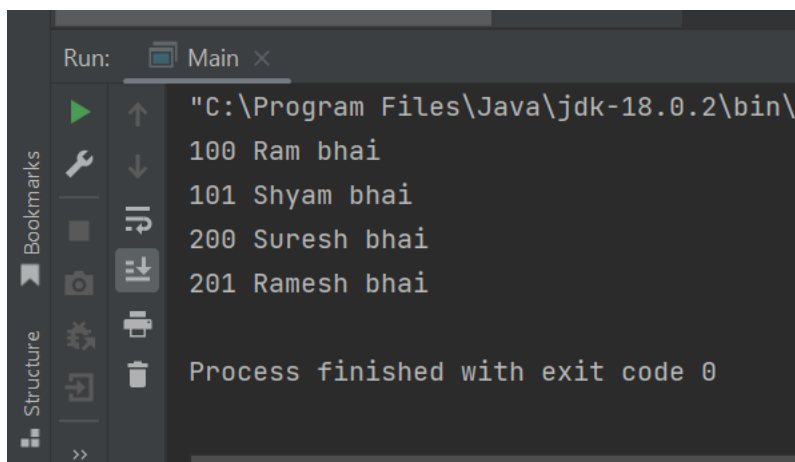
Output

```
Run:    Main  ×

    "C:\Program Files\Java\jdk-18.0.2\bin\
    100 Ram bhai
    101 Shyam bhai
    200 Suresh bhai
    201 Ramesh bhai

    Process finished with exit code 0
```