

```
public class CompositePatternDemo {  
    Run | Debug  
    public static void main(String[] args) {  
        Employee CEO = new Employee(name: "John", department: "CEO", salary: 30000);  
  
        Employee headSales = new Employee(name: "Robert", department: "Head Sales", salary: 20000);  
  
        Employee headMarketing = new Employee(name: "Michel", department: "Head Marketing", salary: 20000);  
  
        Employee clerk1 = new Employee(name: "Laura", department: "Marketing", salary: 10000);  
        Employee clerk2 = new Employee(name: "Bob", department: "Marketing", salary: 10000);  
  
        Employee salesExecutive1 = new Employee(name: "Richard", department: "Sales", salary: 10000);  
        Employee salesExecutive2 = new Employee(name: "Rob", department: "Sales", salary: 10000);  
  
        CEO.add(headSales);  
        CEO.add(headMarketing);  
  
        headSales.add(salesExecutive1);  
        headSales.add(salesExecutive2);  
  
        headMarketing.add(clerk1);  
        headMarketing.add(clerk2);  
  
        // print all employees of the organization  
        System.out.println(CEO);  
  
        for (Employee headEmployee : CEO.getSubordinates()) {  
            System.out.println(headEmployee);  
  
            for (Employee employee : headEmployee.getSubordinates()) {  
                System.out.println(employee);  
            }  
        }  
    }  
}
```

```

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

public class Employee {
    private String name;
    private String department;
    private int salary;
    private List<Employee> subordinates;

    public Employee(String name, String department, int salary) {
        this.name = name;
        this.department = department;
        this.salary = salary;
        subordinates = new ArrayList<Employee>();
    }

    public void add(Employee e) {
        subordinates.add(e);
    }

    public void remove(Employee e) {
        subordinates.remove(e);
    }

    public List<Employee> getSubordinates() {
        return subordinates;
    }

    public String toString() {
        return ("Employee :[ Name : " + name + ", dept : " + department + ", salary : " + salary + " ]");
    }
}

```

Output

```

Employee :[ Name : John, dept : CEO, salary :30000 ]
Employee :[ Name : Robert, dept : Head Sales, salary :20000 ]
Employee :[ Name : Richard, dept : Sales, salary :10000 ]
Employee :[ Name : Rob, dept : Sales, salary :10000 ]
Employee :[ Name : Michel, dept : Head Marketing, salary :20000 ]
Employee :[ Name : Laura, dept : Marketing, salary :10000 ]
Employee :[ Name : Bob, dept : Marketing, salary :10000 ]

```

UML

