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```
Employee.java
1 import java.util.ArrayList;
2 import java.util.List;
3
4 public class Employee {
5     private String name;
6     private String dept;
7     private int salary;
8     private List<Employee> subordinates;
9
10    public Employee(String name, String dept, int salary)
11    {
12        this.name = name;
13        this.dept = dept;
14        this.salary = salary;
15        subordinates = new ArrayList<Employee>();
16    }
17
18    public void add (Employee curr)
19    {
20        subordinates.add(curr);
21    }
22
23    public void remove (Employee curr)
24    {
25        subordinates.remove(curr);
26    }
27
28    public List<Employee> getSubordinates()
29    {
30        return subordinates;
31    }
32
33    public String toString()
34    {
35        return ("Employee :[Name : " + name + ", dept : " + dept + ", salary : " + salary + "]);
36    }
37
38 }
```

```

1 public class CompositePatternDemo {
2     public static void main(String[] args)
3     {
4         Employee CEO = new Employee("John", "CEO", 30000);
5         Employee headSales = new Employee("Robert", "Head Sales", 20000);
6         Employee headMarketing = new Employee("Michel", "Head Marketing", 20000);
7         Employee clerk1 = new Employee("Laura", "Marketing", 10000);
8         Employee clerk2 = new Employee("Bob", "Marketing", 10000);
9         Employee saleExecuting1 = new Employee("Richard", "Sales", 10000);
10        Employee saleExecuting2 = new Employee("Rob", "Sales", 10000);
11        CEO.add(headSales);
12        CEO.add(headMarketing);
13        headSales.add(saleExecuting1);
14        headSales.add(saleExecuting2);
15        headMarketing.add(clerk1);
16        headMarketing.add(clerk2);
17        System.out.println(CEO);
18        for(Employee headEmployee : CEO.getSubordinates())
19        {
20            System.out.println(headEmployee);
21            for(Employee employee : headEmployee.getSubordinates())
22            {
23                System.out.println(employee);
24            }
25        }
26    }
27 }

```

UML

