interface EmpInfo {

void setEmpDetails(String name, int empID);

void dispEmpDetails();

}

interface SalCal {

void calBasicSal();

void calBonus();

}

interface PayProcess {

void payProcess();

void genSlip();

}

class PayrollProcessor implements PayProcess {

public void payProcess() {

System.out.println("Payroll processed successfully.");

}

public void genSlip() {

System.out.println("Payslip generated successfully.");

}

}

class Employee implements EmpInfo, SalCal {

private String name;

private int empID;

private double basicSalary;

private double bonus;

public Employee() {

this.name = "";

this.empID = 0;

this.basicSalary = 0.0;

this.bonus = 0.0;

}

public void setEmpDetails(String name, int empID) {

this.name = name;

this.empID = empID;

}

public void dispEmpDetails() {

System.out.println("Employee: " + name + ", ID: " + empID + ", BasicSal:" + basicSalary + ", Bonus:" + bonus);

}

public void calBasicSal() {

// Logic for calculating basic salary

basicSalary = 50000;

System.out.println("Basic Salary calculated: " + basicSalary);

}

public void calBonus() {

// Logic for calculating bonus

bonus = 10000;

System.out.println("Bonus calculated: " + bonus);

}

}

class SalaryManagementSystem implements EmpInfo, SalCal, PayProcess {

private Employee employee;

private PayrollProcessor payrollProcessor;

public SalaryManagementSystem() {

employee = new Employee();

payrollProcessor = new PayrollProcessor();

}

public void setEmpDetails(String name, int empID) {

employee.setEmpDetails(name, empID);

}

public void dispEmpDetails() {

employee.dispEmpDetails();

}

public void calBasicSal() {

employee.calBasicSal();

}

public void calBonus() {

employee.calBonus();

}

public void payProcess() {

System.out.println("Processing payroll for employee...");

calBasicSal();

calBonus();

System.out.println("Payroll processing completed.");

}

public void genSlip() {

System.out.println("Generating payslip for employee...");

dispEmpDetails();

System.out.println("Payslip generated successfully.");

}

}

public class lab4 {

public static void main(String[] args) {

SalaryManagementSystem s1 = new SalaryManagementSystem();

s1.setEmpDetails("L Vinay", 2347126);

s1.dispEmpDetails();

s1.payProcess();

s1.genSlip();

System.out.println("\n");

SalaryManagementSystem s2 = new SalaryManagementSystem();

s2.setEmpDetails("Kumar", 2347125);

s2.dispEmpDetails();

s2.payProcess();

s2.genSlip();

}

}

