**PRINCIPLE OF INHERITANCE**

PROGRAM :

import java.util.Scanner;

class Employee {

String empName, address, mailId;

long empId, mobileNo;

double basicPay, da, hra, pf, staffClub, grossSalary, netSalary;

void getDetails() {

Scanner sc = new Scanner(System.in);

System.out.print("Enter Employee ID: ");

empId = sc.nextLong();

sc.nextLine(); // consume newline

System.out.print("Enter Employee Name: ");

empName = sc.nextLine();

System.out.print("Enter Address: ");

address = sc.nextLine();

System.out.print("Enter Mail ID: ");

mailId = sc.nextLine();

System.out.print("Enter Mobile Number: ");

mobileNo = sc.nextLong();

System.out.print("Enter Basic Pay: ");

basicPay = sc.nextDouble();

}

void calculateSalary(double daPercent, double hraPercent, double pfPercent, double staffClubPercent) {

da = (daPercent / 100) \* basicPay;

hra = (hraPercent / 100) \* basicPay;

pf = (pfPercent / 100) \* basicPay;

staffClub = (staffClubPercent / 100) \* basicPay;

grossSalary = basicPay + da + hra;

netSalary = grossSalary - (pf + staffClub);

}

void displayPaySlip() {

System.out.println("\n------ PAY SLIP ------");

System.out.println("Employee ID : " + empId);

System.out.println("Name : " + empName);

System.out.println("Address : " + address);

System.out.println("Mail ID : " + mailId);

System.out.println("Mobile No. : " + mobileNo);

System.out.println("Basic Pay : " + basicPay);

System.out.println("DA : " + da);

System.out.println("HRA : " + hra);

System.out.println("PF : " + pf);

System.out.println("Staff Club : " + staffClub);

System.out.println("Gross Salary : " + grossSalary);

System.out.println("Net Salary : " + netSalary);

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

}

}

class Programmer extends Employee {

void process() {

getDetails();

calculateSalary(97, 10, 12, 1);

displayPaySlip();

}

}

class AssistantProfessor extends Employee {

void process() {

getDetails();

calculateSalary(110, 20, 12, 5);

displayPaySlip();

}

}

class AssociateProfessor extends Employee {

void process() {

getDetails();

calculateSalary(130, 30, 12, 10);

displayPaySlip();

}

}

class Professor extends Employee {

void process() {

getDetails();

calculateSalary(140, 40, 12, 15);

displayPaySlip();

}

}

public class Employeepayslip {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.println("Choose Designation:");

System.out.println("1. Programmer");

System.out.println("2. Assistant Professor");

System.out.println("3. Associate Professor");

System.out.println("4. Professor");

System.out.print("Enter choice: ");

int choice = sc.nextInt();

Employee emp;

switch (choice) {

case 1:

emp = new Programmer();

((Programmer) emp).process();

break;

case 2:

emp = new AssistantProfessor();

((AssistantProfessor) emp).process();

break;

case 3:

emp = new AssociateProfessor();

((AssociateProfessor) emp).process();

break;

case 4:

emp = new Professor();

((Professor) emp).process();

break;

default:

System.out.println("Invalid choice.");

}

}

}

OUTPUT:

Choose Designation:

1. Programmer

2. Assistant Professor

3. Associate Professor

4. Professor

Enter choice: 1

Enter Employee ID: 123

Enter Employee Name: dhth

Enter Address: ghfjhhj

Enter Mail ID: cyi@mnhkmgf

Enter Mobile Number: 12346788

Enter Basic Pay: 10000

------ PAY SLIP ------

Employee ID : 123

Name : dhth

Address : ghfjhhj

Mail ID : cyi@mnhkmgf

Mobile No. : 12346788

Basic Pay : 10000.0

DA : 9700.0

HRA : 1000.0

PF : 1200.0

Staff Club : 100.0

Gross Salary : 20700.0

Net Salary : 19400.0

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