import java.util.Scanner;

// Base Employee class

class Employee {

String empName, empId, address, mailId, mobileNo;

double basicPay, grossSalary, netSalary;

void getDetails() {

Scanner sc = new Scanner(System.in);

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

empName = sc.nextLine();

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

empId = 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.nextLine();

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

basicPay = sc.nextDouble();

}

void displayPaySlip(String designation, double DA\_percent, double HRA\_percent, double PF\_percent, double SCF\_percent) {

double DA = (DA\_percent / 100) \* basicPay;

double HRA = (HRA\_percent / 100) \* basicPay;

double PF = (PF\_percent / 100) \* basicPay;

double SCF = (SCF\_percent / 100) \* basicPay;

grossSalary = basicPay + DA + HRA;

netSalary = grossSalary - (PF + SCF);

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

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

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

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

System.out.println("Email: " + mailId);

System.out.println("Mobile: " + mobileNo);

System.out.println("Designation: " + designation);

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 Fund: " + SCF);

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

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

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

}

}

// Subclasses

class Programmer extends Employee {

void generatePaySlip() {

getDetails();

if (basicPay < 15000 || basicPay > 20000) {

System.out.println("Basic pay not in range for Programmer (15000 - 20000).");

return;

}

displayPaySlip("Programmer", 97, 10, 12, 1);

}

}

class AssistantProfessor extends Employee {

void generatePaySlip() {

getDetails();

if (basicPay < 20001 || basicPay > 30000) {

System.out.println("Basic pay not in range for Assistant Professor (20001 - 30000).");

return;

}

displayPaySlip("Assistant Professor", 110, 20, 12, 5);

}

}

class AssociateProfessor extends Employee {

void generatePaySlip() {

getDetails();

if (basicPay < 30001 || basicPay > 40000) {

System.out.println("Basic pay not in range for Associate Professor (30001 - 40000).");

return;

}

displayPaySlip("Associate Professor", 130, 30, 12, 10);

}

}

class Professor extends Employee {

void generatePaySlip() {

getDetails();

if (basicPay <= 40000) {

System.out.println("Basic pay not in range for Professor (> 40000).");

return;

}

displayPaySlip("Professor", 140, 40, 12, 15);

}

}

// Main class

public class ex3{

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.println("Choose Designation to Generate Pay Slip:");

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 your choice: ");

int choice = sc.nextInt();

switch (choice) {

case 1:

new Programmer().generatePaySlip();

break;

case 2:

new AssistantProfessor().generatePaySlip();

break;

case 3:

new AssociateProfessor().generatePaySlip();

break;

case 4:

new Professor().generatePaySlip();

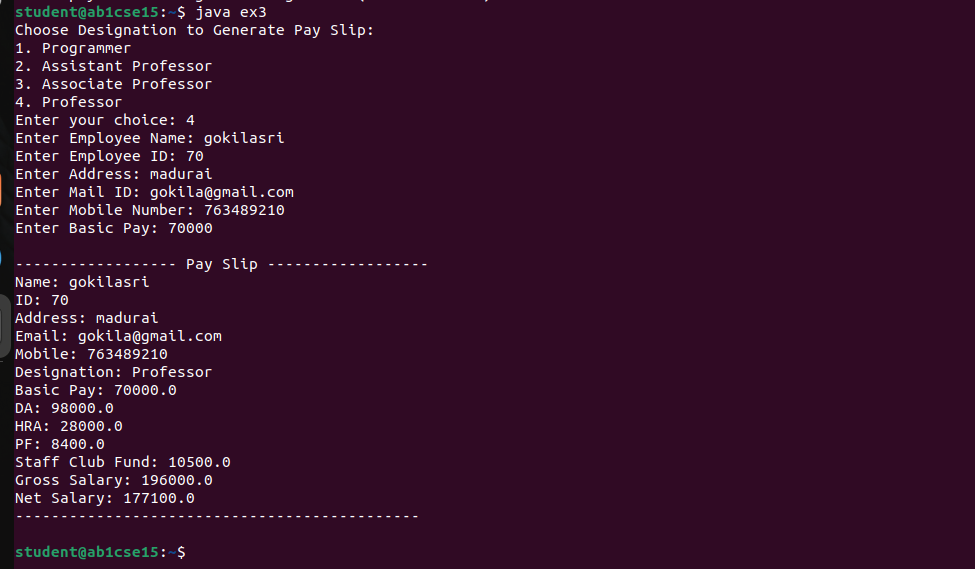
break;

default:

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

}

}

}