PRACTICE - 5

/*Write a Java program to create a class Employee with members empid, empname, empnohrs, empbasic, emphra(%), empda(%),empit(%), empgross. Include methods to do the following:
i. Accept all values from the user. Note HRA, DA and IT are given in %

ii. Calculate the gross salary based on the formula
empgross= empbasic + empbasic*emphra + empbasic*empda - empbasic*empit
iii. Consider the overtime amount to be Rs.100 per hour. If empnohrs >200, for everyhour the employee is to be given additional payment Calculate the additional payment and update the gross. If empnohrs<200, reduce Rs.100 per hour and update the gross.
*/

```
import java.util.Scanner;
class Employee
 {
  private int empid,empnohrs,h;
  private String empname;
  private double empbasic,emphra,empda,empit,empgross;

 void accept()
 {
  Scanner sc = new Scanner(System.in);
  System.out.println("---------------");
  System.out.println("Enter Employee id:");
  empid=sc.nextInt();
  System.out.println("Enter Employee name:");
  empname=sc.next();
  System.out.println("Enter the Basic pay of the employee:");
  empbasic=sc.nextDouble();
  System.out.println("Enter the number of hours the employee has worked for:");
  empnohrs=sc.nextInt();
  System.out.println("Enter the House rent allowance(%):");
  emphra=sc.nextDouble();
  System.out.println("Enter dearness allowance(%):");
  empda=sc.nextDouble();
  System.out.println("Enter Income tax(%):");
  empit=sc.nextDouble();
 }
void calculate()
```

```
 {
  if(empnohrs>200)
  {
  empgross =
empbasic+((empbasic*emphra)/100)+((empbasic*empda)/100)-((empbasic*empit)/100)+((empn
ohrs-200)*100);
 }
 else
 {
  empgross =
empbasic+((empbasic*emphra)/100)+((empbasic*empda)/100)-((empbasic*empit)/100)-((200-e
mpnohrs)*100);
}
}
void display()
{
 System.out.println("\t**********");
 System.out.println("\n Employee details are:");
 System.out.println(" ID:"+" " + empid);
 System.out.println(" NAME:"+" "+ empname);
 System.out.println(" EMPGROSS:"+" " + empgross);
}
}
class Employeemain
{
 public static void main(String args[])
  {
   Scanner sc=new Scanner(System.in);
   System.out.println("Enter the number of employees:");
   int n = sc.nextInt();
   Employee e[]=new Employee[n];
   for(int i=0;i<n;i++)
{
    e[i]=new Employee();
}
for(int i=0;i<n;i++)
{
 System.out.println("Enter Employee"+" "+(i+1)+" details:");
 e[i].accept();
 e[i].calculate();
}
for(int i=0;i<n;i++)
{
e[i].display();
```

```
}
}
}
```

Command Prompt

```
D:\coding files\OOJ Lab>java Employeemain
Enter the number of employees:
2
Enter Employee 1 details:
---------------
Enter Employee id:
1
Enter Employee name:
hem
Enter the Basic pay of the employee:
20000
Enter the number of hours the employee has worked for:
89
Enter the House rent allowance(%):
8000
Enter dearness allowance(%):
5000
Enter Income tax(%):
2157.5
Enter Employee 2 details:
---------------
Enter Employee id:
2
Enter Employee name:
sin
Enter the Basic pay of the employee:
40000
Enter the number of hours the employee has worked for:
45
Enter the House rent allowance(%):
12000
Enter dearness allowance(%):
8000
Enter Income tax(%):
4157
        **********

 Employee details are:
 ID: 1
 NAME: hem
 EMPGROSS: 2177400.0
        **********
```

```
Enter the House rent allowance(%):
12000
Enter dearness allowance(%):
8000
Enter Income tax(%):
4157
        **********

 Employee details are:
 ID: 1
 NAME: hem
 EMPGROSS: 2177400.0
        **********

 Employee details are:
 ID: 2
 NAME: sin
 EMPGROSS: 6361700.0
```

/***Create a class Age which has the members – years and months. Collect the age of two people (Choose their names yourself) (create two age objects) and find who is the elder of the two people.***/

```
import java.util.Scanner;
class age
{
  private int years,months;
  private String name;
  private int a;
  void accept(){
    System.out.println("Enter name:");
    Scanner sc = new Scanner(System.in);
    name=sc.next();
    System.out.println("Enter age in years and months:");
    years=sc.nextInt();
    months=sc.nextInt();
  }
```

```
int calculate()
{
if(years>1)
{
 a=(years*12)+months;
}
else
{
 a=years+months;
}
return a;
}
void display()
{
 System.out.println("Person with name " + name +" "+ "is elder");
}
}
class Agemain
{
 public static void main(String args[])
 {
  age a1=new age();
  age a2=new age();
  a1.accept();
  a2.accept();
if(a1.calculate()>a2.calculate())
{
a1.display();
}
else
{
a2.display();
}
}
}
```

```
D:\coding files\OOJ Lab>java Agemain
Enter name:
hem
Enter age in years and months:
19 1
Enter name:
sin
Enter age in years and months:
25 7
Person with name sin is elder

D:\coding files\OOJ Lab>
```