OOJ Lab-3 [Extra Programs]

(1) Write a JAVA program to create a class Employee with members empid, empname, empnohrs, empbasic, emphra (%), empda (%), 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 * emphra + empbasic * empda - empbasic * empit.

iii) Consider the overtime amount to be Rs.100 per hour. If empnohrs > 200, for every hour 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.

→

CODE:

```
import java.util.*;
class Employee
{
  private int empid;
```

```
private String empname;
private int emphrs;
private double empbasic;
private double emphra;
private double empda;
private double empit;
private double empgross;
private double empfinalgross;
private int empextrahrs;
private double empextraamt;
private double emplessamt;
private double emplesshrs;

void accept()
{
    Scanner ss = new Scanner(System.in);
    System.out.println("Enter Employee ID");
    empid = ss.nextInt();
    System.out.println("Enter employee name");
    empname = ss.next();
    System.out.println("Enter number of hours worked
by the employee");
    emphrs = ss.nextInt();
```

```
System.out.println("Enter basic salary of employee");
empbasic=ss.nextDouble();
System.out.println("Enter HRA percent");
empHra=ss.nextDouble();
System.out.println("Enter DA percent");
empda=ss.nextDouble();
System.out.println("Enter IT percent");
empit=ss.nextDouble();
}
void gross()
{
if(empnohrs==200)
{
empgross=empbasic+empbasic*(empHra/100)+
empbasic*(empda/100)-empbasic*(empit/100);
System.out.println("Gross salary of the employee
is "+empgross);
}
else if(empnohrs>200)
{
empgross=empbasic+empbasic*(empHra/100)+-
empbasic*(empit/100);
```

```
empextrahrs = empnohrs - 200;
empextraamt = empextrahrs * 100;
empfinalgross = empgross + empextraamt;
System.out.println("Gross salary of the employee is "
+ empfinalgross);
}
else if (empnohrs < 200)
{
empgross = empbasic + empbasic * (empha / 100) +
empbasic * (empda / 100) - empbasic * (empit / 100);
emplesshrs = 200 - empnohrs;
emplessamt = emplesshrs * 100;
empfinalgross = empgross - emplessamt;
System.out.println("Gross salary of the employee is
" + empfinalgross);
}
}
}
class Employeemain
{
public static void main(String args[])
{
```

```
        Employee emp = new Employee();
        emp.accept();
        emp.gross();
    }
}
```

② 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.

→

CODE:

```
import java.util.*;
class Age {
int years;
int months;
Age()
{}
Age(int years, int months)
{
    this.years = years;
    this.months = months;
}
```

```
void accpt()
 {
    Scanner s = new Scanner(System.in);
    System.out.println("Enter years:");
    years = s.nextInt();
    System.out.println("Enter months:");
    months = s.nextInt();
  }
 }
class AgeMain
 {
 public static void main(String ss[])
 {
   Age a = new Age(20,9);
System.out.println("Sample input:"+a.years+" "a.months);
Age a1 = new Age();
   System.out.println("Enter age of Ram:");
   a1.accpt();
   Age a2 = new Age();
   System.out.println("Enter age of Shyam");
   a2.accept();
   int t1 = a1.years*12 + a1.months;
```

```
int t2 = a2.years * 12 + a2.months;
    if (t1 > t2)
{
    System.out.println ("Ram is elder than Shyam");
}
 else if (t2 > t1)
{
    System.out.println ("Shyam is elder than Ram");
}
 else
{
    System.out.println ("Ram and Shyam are of
same age");
    }

}

}
```