OOJ Lab -3(EXTRA PROGRAMS)

1. 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.*;
class Employee
{
        private int empid;
        private String empname;
        private int empnohrs;
        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");
        empnohrs=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*(empda/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*(emphra/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();
}
}
```

OUTPUT:

```
C:\Users\win10\Documents\Java lab programs>java Employeemain
Enter employee ID
123
Enter employee name
Ajay
Enter number of hours worked by the employee
300
Enter basic salary of employee
5000
Enter HRA percent
2
Enter DA percent
1
Enter IT percent
3
Gross salary of the employee is 15000.0
```

```
C:\Users\win10\Documents\Java lab programs>java Employeemain
Enter employee ID
159
Enter employee name
Priyanka
Enter number of hours worked by the employee
200
Enter basic salary of employee
9000
Enter HRA percent
6
Enter DA percent
2
Enter IT percent
4
Gross salary of the employee is 9360.0
```

```
C:\Users\win10\Documents\Java lab programs>java Employeemain
Enter employee ID
777
Enter employee name
Tom
Enter number of hours worked by the employee
80
Enter basic salary of employee
20000
Enter HRA percent
3
Enter DA percent
2
Enter IT percent
1
Gross salary of the employee is 8800.0
```

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.

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

OUTPUT:

```
C:\Users\win10\Documents\Java lab programs>java AgeMain
Sample input:20 9
Enter age of Ram:
Enter years:
18
Enter months:
3
Enter age of Shyam:
Enter years:
5
Enter months:
11
Ram is elder than Shyam
```