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 &gt;200, for everyhour the employee is to be given additional payment Calculate the additional payment and update the gross. If empnohrs&lt;200, reduce Rs.100 per hour and update the gross.

```
import java.util.*;
class Employee{
    public int empid,empnohrs;
    public double empbasic,emphra,empda,empit,empgross,n,Tsal;
    public String empname;
    void acceptdetails(){
        Scanner xx=new Scanner(System.in);
        System.out.println("Enter employee ID");
        empid=xx.nextInt();
        System.out.println("Enter employee name");
        empname=xx.next();
        System.out.println("Enter number of hours employee worked");
        empnohrs=xx.nextInt();
        System.out.println("Enter basic salary of emp");
        empbasic=xx.nextDouble();
        System.out.println("Enter emp HRA");
        emphra=xx.nextDouble();
        System.out.println("Enter emp DA");
        empda=xx.nextDouble();
        System.out.println("Enter emp IT");
        empit=xx.nextDouble();
    }
    void empgrosscal(){

empgross=empbasic+empbasic*(emphra/100)+empbasic*(empda/100)-empbasic*(empit/100);

    }
    void overtime(){
        if(empnohrs>200.0){
            n=empnohrs-200.0;
            Tsal= empgross + (n*100.0);
            System.out.println("The gross salary of employee is:"+Tsal);

        }
        else{
            n=200-empnohrs;
            Tsal=empgross-(n*100.0);
            System.out.println("The gross salary of employee is:"+Tsal);
        }
    }

}
class Empmain
{
    public static void main(String args[]){
```

```java
        Employee emp=new Employee();
        emp.acceptdetails();
        emp.empgrosscal();
        emp.overtime();

    }
}
```

```
C:\Users\praji\Desktop\java>java Empmain
Enter employee ID
123
Enter employee name
aarya
Enter number of hours employee worked
400
Enter basic salary of emp
25372.1
Enter emp HRA
3
Enter emp DA
5
Enter emp IT
1
The gross salary of employee is:47148.147

C:\Users\praji\Desktop\java>
```

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.

```java
import java.util.*;
class Age
{
    int yr;
    int m;
    void get()
    {
        Scanner ss=new Scanner(System.in);
        System.out.println("ENTER THE NUMBER OF YEARS");
        yr=ss.nextInt();
        System.out.println("ENTER THE NUMBER OF MONTHS(<12)");
        m=ss.nextInt();
    }
    String calc(Age a){
        int t = yr*12+m;
        int t1 = a.yr*12 +a.m;
        if(t>t1)
            return "PERSON1 IS OLDER THAN PERSON2 ";
        else if(t==t1)
            return "PERSON1 AND PERSON2 ARE OF SAME AGE";
        else
            return "PERSON2 IS OLDER THAN PERSON1";
}
}
class AgeComp
{
    public static void main(String args[])
    {
        Age a1=new Age();
        Age a2=new Age();
        System.out.println("ENTER THE    AGE OF THE PERSON1");
        a1.get();
        System.out.println("ENTER THE    AGE OF THE PERSON2");
        a2.get();
        System.out.println(a1.calc(a2));
}
}
```

```
C:\Users\praji\Desktop\java>java AgeComp
ENTER THE  AGE OF THE PERSON1
ENTER THE NUMBER OF YEARS
23
ENTER THE NUMBER OF MONTHS(<12)
2
ENTER THE  AGE OF THE PERSON2
ENTER THE NUMBER OF YEARS
34
ENTER THE NUMBER OF MONTHS(<12)
8
PERSON2 IS OLDER THAN PERSON1

C:\Users\praji\Desktop\java>
```