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 every hour the employee is to be given additional payment Calculate the additional payment and update the gross. If empnohrs<200, reduce Rs.100 perhour and update the gross.

```
import java.util.Scanner;
class employee
{
  String  empid,empname;
  float empnohrs, empbasic, emphra, empda,empit, empgross;
  Scanner in =new Scanner(System.in);
  employee()
  {
    System.out.print("Enter employee details :");
    System.out.print("employee id :");
    empid= in.nextLine();
    System.out.print("name :");
    empname= in.nextLine();
    System.out.print("hours of work :");
    empnohrs= in.nextFloat();
    System.out.print("basic :");
    empbasic= in.nextFloat();
    System.out.print("HRA (%):");
    emphra= in.nextFloat();
    System.out.print("DA (%):");
    empda= in.nextFloat();
    System.out.print("It(%) :");
```

```
    empit= in.nextFloat();
    calc_gross();
    update_gross();
  }
  void calc_gross()
  {
    empgross=(float)empbasic*(float)(1+(emphra +empda -
empit)/100.0);
    System.out.println("gross salary of the employee is
"+empgross);
  }
  void update_gross()
  {
    float ot=(empnohrs-200)*100;
    empgross+=ot;
    System.out.println("gross salary of the employee after
adding overtime is "+empgross);

  }
}
class record{
  public static void main(String[] args) {
    employee e =new employee();
  }
}
```

```
PS D:\sem3\ooj_lab\16-10-2020> javac .\record.java
PS D:\sem3\ooj_lab\16-10-2020> java record
Enter employee details :employee id :231
name :qwerty
hours of work :210
basic :10000
HRA (%):7
DA (%):5
It(%) :9
gross salary of the employee is 10300.0
gross salary of the employee after adding overtime is 11300.0
PS D:\sem3\ooj_lab\16-10-2020>
```

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.

```
class age{
  private int yob ,mob;
  String name;
  age(String n,int m,int y)
  {
    name=n;
    mob=m;
    yob=y;
  }
  static void eldr(age x,age y)
  {
    if(x.yob>y.yob)
      System.out.println(x.name+" is elder");
    else if (x.yob==y.yob)
    {
      if(x.mob>y.mob)
        System.out.println(x.name+" is elder");
      else if (x.yob==y.yob)
        System.out.println("date required to decide");
      else
        System.out.println(y.name+"is elder");
    }
    else
      System.out.println(y.name+"is elder");
  }
}
class elder{
public static void main(String[] args) {
  age a=new age("y",9,2001);
  age b=new age("x",6,2001);
  age.eldr(a,b);
}

}
```

```
PS D:\sem3\ooj_lab\16-10-2020> javac .\elder.java
PS D:\sem3\ooj_lab\16-10-2020> java elder
y is elder
PS D:\sem3\ooj_lab\16-10-2020>
```