

WAP to create a class Employee with member empid, empname, emphours, empbasic, empha, empda, empit, empgross.

Include methods to do the following:

- i) Accept all values from the user. Note HRA, DA & IT are given in %.
- ii) Calculate the gross salary based on the formula:
$$\text{empgross} = \text{empbasic} + \text{empbasic} * \text{empha} + \text{empbasic} * \text{empda} - \text{empbasic} * \text{empit}$$
- iii) Consider the OT amount to be Rs. 100 per hour. If emphours > 200, for every hour the employee is to be given additional payment. Calculate the additional payment and update the gross. If emphours < 200, reduce Rs. 100 per hour and update the gross.

```
> import java.util.Scanner;
class Employee {
    String empid, empname;
    int emphours;
    double empbasic, empha, empda, empit, empgross;
    Scanner ss = new Scanner(System.in);
    void accept() {
        System.out.println("Enter name and id");
        empname = ss.next();
        empid = ss.next();
        System.out.println("Enter the number of hours");
        emphours = ss.nextInt();
        System.out.println("Enter your basic salary");
        empbasic = ss.nextDouble();
        System.out.println("Enter empha, empda, empit");
        empha = ss.nextDouble();
```



```
empda = ss.nextDouble();
empit = ss.nextDouble();
```

3

```
void calc() {
```

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

```
    if (emphrs >= 200)
```

```
        empgross = emphrs * 100;
```

```
    else
```

```
        empgross = emphrs * 100;
```

```
    System.out.println("The gross salary is"
        + empgross);
```

3

3

```
class EmployeeMain {
```

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

```
        Scanner ss = new Scanner(System.in);
```

```
        System.out.println("Enter the no of employees");
```

```
        int n = ss.nextInt();
```

```
        Employee e[] = new Employee[n];
```

```
        for (int i = 0; i < n; i++) {
```

```
            e[i] = new Employee();
```

```
            System.out.println("Enter details of employee"
                + (i+1));
```

```
            e[i].accept();
```

3

```
        for (int i = 0; i < n; i++) {
```

```
            System.out.println("Employee " + (i+1));
```

```
            e[i].calc();
```

3

3

```
1 import java.util.Scanner;
2 class Employee{
3     String empid,empname;
4     int emphrs;
5     double empbasic,emphra,empda,empit,empgross;
6     Scanner ss=new Scanner(System.in);
7     void accept(){
8         System.out.println("Enter your name and id:");
9         empname=ss.next();
10        empid=ss.next();
11        System.out.println("Enter the number of hours");
12        emphrs=ss.nextInt();
13        System.out.println("Enter your basic salary");
14        empbasic=ss.nextDouble();
15        System.out.println("Enter  emphra,empda,empit");
16        emphra=ss.nextDouble();
17        empda=ss.nextDouble();
18        empit=ss.nextDouble();
19    }
20    void calc(){
21        empgross=empbasic+(emphra*empbasic)/100+(empda*empbasic)/100-(empit*empbasic)/100;
22        if(emphrs>=200)
23            empgross+=emphrs*100;
24        else
25            empgross-=emphrs*100;
26        System.out.println("The gross salary is"+ empgross);
27    }
28 }
29 class Employeeemain{
30     public static void main(String args[]){
31         Scanner ss=new Scanner(System.in);
32         System.out.println("Enter the number of employees:");
33         int n=ss.nextInt();
34         Employee e[]=new Employee[n];
35         for(int i=0;i<n;i++){
36             e[i]=new Employee();
37             System.out.println("Enter the details of employee "+(i+1));
38             e[i].accept();
39         }
40         for(int i=0;i<n;i++){
41             System.out.println("Employee "+(i+1));
42             e[i].calc();
43         }
44     }
45 }
```

```

emp.java
1 import java.util.Scanner;
2 class Employee{
3     String empid,empname;
4     int emphrs;
5     double empbasic,emphra,empda,empit,empgross;
6     Scanner ss=new Scanner(System.in);
7     void accept(){
8         System.out.println("Enter your name and id:");
9         empname=ss.next();
10        empid=ss.next();
11        System.out.println("Enter the number of hours");
12        emphrs=ss.nextInt();
13        System.out.println("Enter your basic salary");
14        empbasic=ss.nextDouble();
15        System.out.println("Enter emphra,empda,empit");
16        emphra=ss.nextDouble();
17        empda=ss.nextDouble();
18        empit=ss.nextDouble();
19    }
20    void calc(){
21        empgross=empbasic+(emphra*empbasic)/100+(empda*empbasic)/100-(empit*empbasic)/100;
22        if(emphrs>200)
23            empgross+=emphrs*100;
24        else
25            empgross-=emphrs*100;
26        System.out.println("The gross salary is"+ empgross);
27    }
28 }
29 class Employeeemain{
30     public static void main(String args[]){
31         Scanner ss=new Scanner(System.in);
32         System.out.println("Enter the number of employees:");
33         int n=ss.nextInt();
34         Employee e[]=new Employee[n];
35         for(int i=0;i<n;i++){
36             e[i]=new Employee();
37             System.out.println("Enter the details of employee "+(i+1));
38             e[i].accept();
39         }
40         for(int i=0;i<n;i++){
41             System.out.println("Employee "+(i+1));
42             e[i].calc();
43         }
44     }
45 }

```

Command Prompt

```

C:\Program Files\Java\bin\basic>java Employeeemain
Enter the number of employees:
2
Enter the details of employee 1
Enter your name and id:
Kushi
b3444
Enter the number of hours
205
Enter your basic salary
50000
Enter emphra,empda,empit
4
3
2
Enter the details of employee 2
Enter your name and id:
Harshitha
b4333
Enter the number of hours
107
Enter your basic salary
60000
Enter emphra,empda,empit
4
3
2
Employee 1
The gross salary is73000.0
Employee 2
The gross salary is52300.0

```


⇒ Create a class Age which has the members - years and months. Collect the age of two people (Choose their name yourself) (create two age objects) & find who is older of the two people.

```
import java.util.Scanner;
class Age {
    Scanner s1 = new Scanner(System.in);
    int years, months;
    void getdata() {
        System.out.println("Enter the number of years");
        years = s1.nextInt();
        System.out.println("Enter the number of months");
        months = s1.nextInt();
    }
    void cala(Age a2) {
        if (years > a2.years)
            SOP("A1 is older than A2");
        else if (years < a2.years)
            System.out.println("A2 is older than A1");
        else {
            if (months > a2.months)
                System.out.println("A1 is older than A2");
            else if (months < a2.months)
                System.out.println("A2 is older than A1");
            else
                System.out.println("A2 & A1 are of same age");
        }
    }
}
```



```
class AgeMain() {  
    public static void At main (String args[])  
{  
    Age a1=new Age();  
    Age a2=new Age();  
    System.out.println("Enter the age of A1");  
    a1.getdata();  
    System.out.println("Enter the age of A2");  
    a2.getdata();  
    a1 a1.calc(a2);  
}  
}
```

```
1 import java.util.Scanner;
2 class Age{
3     Scanner s1=new Scanner(System.in);
4     int years,months;
5     void getdata(){
6         System.out.println("Enter the number of years");
7         years=s1.nextInt();
8         System.out.println("Enter the number of months");
9         months=s1.nextInt();
10    }
11    void calc(Age a2){
12        if(years>a2.years)
13            System.out.println("A1 is older than A2");
14        else if(a2.years>years)
15            System.out.println("A2 is older than A1");
16        else{
17            if(months>a2.months)
18                System.out.println("A1 is older than A2");
19            else if(months<a2.months)
20                System.out.println("A2 is older than A1");
21            else
22                System.out.println("A2 and A1 are of the same age");
23        }
24    }
25 }
26 class AgeMain{
27     public static void main(String args[]){
28         Age a1=new Age();
29         Age a2=new Age();
30         System.out.println("Enter the age of A1");
31         a1.getdata();
32         System.out.println("Enter the age of A2");
33         a2.getdata();
34         a1.calc(a2);
35     }
36 }
```



```
1 import java.util.Scanner;
2 class Age{
3     Scanner s1=new Scanner(System.in);
4     int years,months;
5     void getdata(){
6         System.out.println("Enter the number of years");
7         years=s1.nextInt();
8         System.out.println("Enter the number of months");
9         months=s1.nextInt();
10    }
11    void calc(Age a2){
12        if(years>a2.years)
13            System.out.println("A1 is older than A2");
14        else if(a2.years>years)
15            System.out.println("A2 is older than A1");
16        else{
17            if(months>a2.months)
18                System.out.println("A1 is older than A2");
19            else if(months<a2.months)
20                System.out.println("A2 is older than A1");
21            else
22                System.out.println("A2 and A1 are of the same age");
23        }
24    }
25 }
26 class AgeMain{
27     public static void main(String args[]){
28         Age a1=new Age();
29         Age a2=new Age();
30         System.out.println("Enter the age of A1");
31         a1.getdata();
32         System.out.println("Enter the age of A2");
33         a2.getdata();
34         a1.calc(a2);
35     }
36 }
```

Command Prompt

C:\Program Files\Java\bin\basic>javac age1.java

C:\Program Files\Java\bin\basic>java AgeMain

Enter the age of A1

Enter the number of years

6

Enter the number of months

4

Enter the age of A2

Enter the number of years

4

Enter the number of months

6

A1 is older than A2

C:\Program Files\Java\bin\basic>java AgeMain

Enter the age of A1

Enter the number of years

5

Enter the number of months

7

Enter the age of A2

Enter the number of years

5

Enter the number of months

9

A2 is older than A1

C:\Program Files\Java\bin\basic>java AgeMain

Enter the age of A1

Enter the number of years


```
1 import java.util.Scanner;
2 class Age{
3     Scanner s1=new Scanner(System.in);
4     int years,months;
5     void getdata(){
6         System.out.println("Enter the number of years");
7         years=s1.nextInt();
8         System.out.println("Enter the number of months");
9         months=s1.nextInt();
10    }
11    void calc(Age a2){
12        if(years>a2.years)
13            System.out.println("A1 is older than A2");
14        else if(a2.years>years)
15            System.out.println("A2 is older than A1");
16        else{
17            if(months>a2.months)
18                System.out.println("A1 is older than A2");
19            else if(months<a2.months)
20                System.out.println("A2 is older than A1");
21            else
22                System.out.println("A2 and A1 are of the same age");
23        }
24    }
25 }
26 class AgeMain{
27     public static void main(String args[]){
28         Age a1=new Age();
29         Age a2=new Age();
30         System.out.println("Enter the age of A1");
31         a1.getdata();
32         System.out.println("Enter the age of A2");
33         a2.getdata();
34         a1.calc(a2);
35     }
36 }
```

Command Prompt

Enter the number of months

6

A1 is older than A2

C:\Program Files\Java\bin\basic>java AgeMain

Enter the age of A1

Enter the number of years

5

Enter the number of months

7

Enter the age of A2

Enter the number of years

5

Enter the number of months

9

A2 is older than A1

C:\Program Files\Java\bin\basic>java AgeMain

Enter the age of A1

Enter the number of years

2

Enter the number of months

3

Enter the age of A2

Enter the number of years

2

Enter the number of months

3

A2 and A1 are of the same age

C:\Program Files\Java\bin\basic>