

~~LAB-3~~ PRACTICE PROGRAMS

PROGRAM 1

INPUT:

```
C:\Users\91944\OneDrive\Desktop\OO\LAB\Lab_3\Empmain.java - Sublime Text (UNREGISTERED)
File Edit Selection Find View Goto Tools Project Preferences Help

1  import java.util.Scanner;
2
3  class Employee
4  {
5      int empid;
6      String empname;
7      double empbasic;
8      int empnohrs;
9      double emphra;
10     double empda;
11     double empit;
12     double empgross;
13     double amt;
14     Scanner ss = new Scanner(System.in);
15
16     Employee()
17     {
18         empid = 0;
19         empname = "";
20         empbasic = 0.0;
21         empnohrs = 0;
22         emphra = 0.0;
23         empda = 0.0;
24         empit = 0.0;
25         empgross = 0.0;
26     }
27
28     void accept()
29     {
30         System.out.println("\n<-----ENTER EMPLOYEE DETAILS----->\n");
31         System.out.print("Enter the Employee ID : ");
32         empid = ss.nextInt();
33         System.out.print("Enter the Employee NAME : ");
34         empname = ss.next();
35         System.out.print("Enter the BASIC SALARY of the Employee : ");
36         empbasic = ss.nextDouble();
37         System.out.print("Enter the NUMBER OF HOURS worked by the Employee : ");
38         empnohrs = ss.nextInt();
39         System.out.print("Enter the Human Resource Allowance (HRA) of the Employee in % : ");
40         emphra = ss.nextDouble();
41         System.out.print("Enter the Dearness Allowance (DA) of the Employee in % : ");
42         empda = ss.nextDouble();
43         System.out.print("Enter the Income Tax (IT) of the Employee in % : ");
44         empit = ss.nextDouble();
45         System.out.println("\n<----->\n");
46     }
47
48     void compute()
49     {
50         empgross = empbasic + (empbasic * emphra) + (empbasic * empda) - (empbasic * empit);
51         if (empnohrs > 200)
52             amt = (empnohrs - 200) * 100;
53         else
54             amt = (200 - empnohrs) * 100;
55     }
56
57     void display()
58     {
59         System.out.println("<-----EMPLOYEE DETAILS----->\n");
60         System.out.println("Employee ID : "+empid);
61         System.out.println("Employee NAME : "+empname);
62         System.out.println("Employee BASIC SALARY : "+empbasic);
63         System.out.println("Employee's NUMBER OF HOURS : "+empnohrs);
64         System.out.println("Employee's HRA in % : "+emphra);
65         System.out.println("Employee's DA in % : "+empda);
66         System.out.println("Employee's IT in % : "+empit);
67         System.out.println("Employee's GROSS SALARY : "+empgross);
68         System.out.println("<----->\n");
69         if (empnohrs > 200)
70         {
71             System.out.println("Employee has worked "+(empnohrs - 200)+" hour(s) overtime!");
72             System.out.println("Employee's UPDATED GROSS SALARY : "+(empgross + amt));
73         }
74         if (empnohrs < 200)
75         {
76             System.out.println("Employee has worked "+(200 - empnohrs)+" hour(s) lesser than expected!");
77             System.out.println("Employee's UPDATED GROSS SALARY : "+(empgross - amt));
78         }
79         System.out.println("\n<----->");
80     }
81 }
82
```

```

83  class Empmain
84  {
85      public static void main(String[] args)
86      {
87          Employee e1 = new Employee();
88          e1.accept();
89          e1.compute();
90          e1.display();
91      }
92  }

```

OUTPUT:

```

C:\Users\91944\OneDrive\Desktop\OOJLAB\Lab_3>java Empmain

<-----ENTER EMPLOYEE DETAILS----->

Enter the Employee ID : 101
Enter the Employee NAME : John
Enter the BASIC SALARY of the Employee : 45000
Enter the NUMBER OF HOURS worked by the Employee : 225
Enter the Human Resource Allowance (HRA) of the Employee in % : 5
Enter the Dearness Allowance (DA) of the Employee in % : 4
Enter the Income Tax (IT) of the Employee in % : 3

<----->

<-----EMPLOYEE DETAILS----->

Employee ID : 101
Employee NAME : John
Employee BASIC SALARY : 45000.0
Employee's NUMBER OF HOURS : 225
Employee's HRA in % : 5.0
Employee's DA in % : 4.0
Employee's IT in % : 3.0
Employee's GROSS SALARY : 315000.0
<----->

Employee has worked 25 hour(s) overtime!
Employee's UPDATED GROSS SALARY : 317500.0

<----->

C:\Users\91944\OneDrive\Desktop\OOJLAB\Lab_3>

```

PROGRAM 2

INPUT:

```
C:\Users\91944\OneDrive\Desktop\OOJLAB\Lab_3\Agemain.java - Sublime Text (UNREGISTERED)
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Booksmain.java x Empmain.java x Agemain.java x

1  import java.util.Scanner;
2
3  class Age
4  {
5      int years;
6      int months;
7      String name;
8      Scanner ss = new Scanner(System.in);
9
10     void accept()
11     {
12         System.out.println("Enter the NAME of the person :");
13         name = ss.next();
14         System.out.println("Enter the number of YEARS :");
15         years = ss.nextInt();
16         System.out.println("Enter the number of MONTHS :");
17         months = ss.nextInt();
18         System.out.println("\n<----->");
19     }
20
21     int compute()
22     {
23         int totmonths;
24         totmonths = (years * 12) + months;
25         return totmonths;
26     }
27
28     void display()
29     {
30         System.out.println("\n<----DETAILS OF THE ELDER PERSON---->\n");
31         System.out.println("NAME : "+name);
32         System.out.println("YEARS : "+years);
33         System.out.println("MONTHS : "+months);
34         System.out.println("\n<----->\n");
35     }
36 }
37
38 class Agemain
39 {
40     public static void main(String[] args)
41     {
42         int tot1, tot2;
43         Age a1 = new Age();
44         Age a2 = new Age();
45         System.out.println("\n<----ENTER PERSON 1 DETAILS---->\n");
46         a1.accept();
47         System.out.println("\n<----ENTER PERSON 2 DETAILS---->\n");
48         a2.accept();
49         tot1 = a1.compute();
50         tot2 = a2.compute();
51         if (tot1 > tot2)
52             a1.display();
53         else if (tot2 > tot1)
54             a2.display();
55         else
56             System.out.println("<----BOTH THE PERSONS ARE OF THE SAME AGE!---->");
57     }
58 }
```

OUTPUT:

```
Command Prompt
C:\Users\91944\OneDrive\Desktop\OOJLAB\Lab_3>javac Agemain.java
C:\Users\91944\OneDrive\Desktop\OOJLAB\Lab_3>java Agemain

<-----ENTER PERSON 1 DETAILS----->

Enter the NAME of the person :
John
Enter the number of YEARS :
20
Enter the number of MONTHS :
5

<----->

<-----ENTER PERSON 2 DETAILS----->

Enter the NAME of the person :
Thomas
Enter the number of YEARS :
19
Enter the number of MONTHS :
9

<----->

<-----DETAILS OF THE ELDER PERSON----->

NAME : John
YEARS : 20
MONTHS : 5

<----->

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```