

# WEEK5-LAB3 PROGRAM

## Extra Programs

**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.**

**CODE:**

```
import java.util.Scanner;

class Age
{
    int years;
    int months;
    double age;

    void take()
    {
        Scanner a=new Scanner(System.in);
        System.out.println("enter the age of ayesha");
        years = a.nextInt();
        System.out.println("enter the age of suleman");
        months = a.nextInt();

    }
}
```

```
double age(){  
    age = years*52.143+months*4.345;  
    return age;  
}  
  
}
```

```
class Main{  
    public static void main(String args[])  
    {  
        String name1="ayeha";  
        String name2="suleman";  
        Age r1=new Age();  
        Age r2=new Age();  
        r1.take();  
        r2.take();  
  
        if(r1.age()>r2.age())  
        {  
            System.out.println("ayesha is elder than suleman");  
        }  
        if(r2.age()>r1.age())  
        {  
            System.out.println("suleman is elder than ayesha");  
        }  
    }  
}
```

```
}  
}  
}
```

```
enter the age of ayesha  
20  
enter the age of suleman  
50  
enter the age of ayesha  
30  
enter the age of suleman  
60  
suleman is elder than ayesha  
  
...Program finished with exit code 0  
Press ENTER to exit console.
```

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

$$\text{empgross} = \text{empbasic} + \text{empbasic} * \text{emphra} + \text{empbasic} * \text{empda} - \text{empbasic} * \text{empit}$$

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 per hour and update the gross.

**CODE:**

```
import java.util.Scanner; class Employee{

int empid;

String empname; int empnohrs;

int empbasic; double emphra; double empda; double empit; double empgross;

void accept() {

Scanner xx=new Scanner(System.in); System.out.println("Enter details-");
System.out.println("Enter ID:"); empid=xx.nextInt();

System.out.println("Enter Name:"); empname=xx.next(); System.out.println("Enter number
of hours:");

empnohrs=xx.nextInt(); System.out.println("Enter basic salary:"); empbasic=xx.nextInt();
System.out.println("Enter HRA in %"); emphra=xx.nextDouble(); System.out.println("Enter
DA in %"); empda=xx.nextDouble(); System.out.println("Enter IT in %");
empit=xx.nextDouble();

}

double salary() {

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

return empgross; }

void overtime() {

int x; if(empnohrs>200){

x=empnohrs-200;

x*=100;

System.out.println("additional payment= "+x+"\n gross salary after addition=
"+(empgross+x));

}
```

```
else if(empnohrs<200){
```

```
x=200-empnohrs;
```

```
x*=100;
```

```
System.out.println("reduced payment= "+x+"\n gross salary after reduction= "+(empgross-x)); }
```

```
}
```

```
}
```

```
class Main{
```

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

```
Employee e1=new Employee();
```

```
e1.accept();
```

```
e1.salary();
```

```
System.out.println("The gross salary is= "+e1.empgross); e1.overtime();
```

```
}}
```

```
Enter details-  
Enter ID:  
2507  
Enter Name:  
ADVITHA  
Enter number of hours:  
5  
Enter basic salary:  
50000  
Enter HRA in %  
34  
Enter DA in %  
45  
Enter IT in %  
56  
The gross salary is= 61500.0  
reduced payment= 19500  
gross salary after reduction= 42000.0  
  
...Program finished with exit code 0  
Press ENTER to exit console.
```