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**DAY :** Wednesday

1.**Create a class called Employee that includes three pieces of information as instance variables—a first name (typeString), a last name (typeString) and a monthly salary (double). Your class should have a constructor that initializes the three instance variables. Provide a set and a get method for each instance variable. If the monthly salary is not positive, set it to 0.0. Write a test application named EmployeeTest that demonstrates class Employee’s capabilities. Create two Employee objects and display each object’s yearly salary. Then give each Employee a 10% raise and display each Employee’s yearly salary again.**

**Program** :

class Employee

{

String fname,lname;

double salary;

Employee(String fname,String lname,double salary)

{

this.fname=fname;

this.lname=lname;

if(salary <0)

salary=0.0;

else

this.salary=salary;

}

void setFname(String fname)

{

this.fname=fname;

}

void setLname(String lname)

{

this.lname=lname;

}

void setSalary(double s)

{

if(salary<0)

salary=0.0;

else

salary=s;

}

String getFname()

{

return fname;

}

String getLname()

{

return lname;

}

double getSalary()

{

return salary;

}

double raiseSalary(int percent)

{

salary+=salary\*(percent/100.0);

return salary;

}

}

public class Main {

public static void main(String[] args) {

Employee e1=new Employee( "The first employee :"+"Pavan tarun ","chakka",40000.0);

Employee e2=new Employee("The second employee ::" +"dinesh","neelam",50000.0);

System.out.println(e1.getFname()+e1.getLname()+" "+e1.getSalary());

double sal=e1.raiseSalary(10);

System.out.println("Annual salary is :"+(12\*sal));

System.out.println(e2.getFname()+e2.getLname()+" "+e2.getSalary());

double sal1=e2.raiseSalary(10);

System.out.println("Annual salary is :"+(12\*sal1));

}

}

Output ::

The first employee :Pavan tarun chakka 40000.0

Annual salary is :528000.0

The second employee :dinesh neelam 50000.0

Annual salary is :660000.0

2. **Create a class called Invoice that a hardware store might use to represent an invoice for an item sold at the store. An Invoice should include four pieces of information as instance variables‐a part number(type String),a part description(type String),a quantity of the item being purchased (type int) and a price per item (double). Your class should have a constructor that initializes the four instance variables. Provide a set and a get method for each instance variable.In addition, provide a method named getInvoice Amount that calculates the invoice amount (i.e., multiplies the quantity by the price per item), then returns the amount as a double value. If the quantity is not positive, it should be set to 0. If the price per item is not positive, it should be set to 0.0. Write a test application named InvoiceTest that demonstrates class Invoice’s capabilities.**

**Program**:

Class Invoice

{

String pno,pdesc;

Int quantity;

Double price;

Invoice(String pno,String pdesc,int q,double price)

{

This.pno=pno;

This.pdesc=pdesc;

If(q<0)

Quantity=0;

Else

Quantity=q;

If(price<0)

Price=0.0;

Else

This.price=price;

}

Void setPno(String pno)

{

This.pno=pno;

}

Void setDesc(String pdesc)

{

This.pdesc=pdesc;

}

Void setQuantity(int q)

{

If(q<0)

Quantity=0;

Else

Quantity=q;

}

Void setPrice(double p)

{

If (p<0)

Price=0.0;

Else

Price=p;

}

String getPno()

{

Return pno;

}

String getPdesc()

{

Return pdesc;

}

Int getQuantity()

{

Return quantity;

}

Double getPrice()

{

Return price;

}

Double getInvoiceAmount()

{

Return (quantity\*price);

}

}

Public class Main {

Public static void main(String[] args) {

Invoice i1=new Invoice(“43”,”Masks”,500,100.0);

Invoice i2=new Invoice(“83”,”sanitizers”,25,250.0);

System.out.println(i1.getPno() +” “+ i1.getPdesc() +” “+i1.getPrice());

System.out.println(“The invoice Amount :”+i1.getInvoiceAmount());

System.out.println(i2.getPno() +” “+ i2.getPdesc() +” “+i2.getPrice());

System.out.println(“The invoice Amount :”+i2.getInvoiceAmount());

}

}

Output :

43 Masks 100.0

The invoice Amount :50000.0

83 sanitizer 250.0

The invoice Amount :6250.0