DATE:16-09-2020

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, Iname;
       double salary;
       Employee(String fname,String Iname,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 Iname)
{
       this.lname=lname;
}
void setSalary(double s)
{
       if(salary<0)
         salary=0.0;
       else
        salary=s;
}
String getFname()
{
       return fname;
}
String getLname()
{
       return Iname;
}
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( "Emp1:"+"Venkatesh ","ChowdaryI",30000.0);
              Employee e2=new Employee("Emp2::" +"Sham","Chowdary",40000.0);
              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 : Venkatesh Chowdaryl 100000.0
Annual salary is :1200000.0
```



The second employee ::Sham Chowdary 50000.0

Annual salary is :600000.0

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 0.0. 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("95","desktop",10,5000.0);
              Invoice i2=new Invoice("88","keyboard",10,225.0);
                     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:
95desktop4700.0
The invoice Amount :50000.0
88 keyboard225.0
The invoice Amoumous 2250.0
```