KALASALINGAM ACADEMY OF RESEARCH AND EDUCATION JAVA PROGRAMMING- CSE 18R272

Name: K.Ravi Sankar Reg. No.: 9919004137

1.Aim: 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 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 firstname;
  String lastname;
  double salary;
  public Employee(String fn,String In,double sal){
     firstname = fn;
     lastname = In;
     if(salary<0){
       salary=0.0;
     }
     else{
       salary = sal;
     }
  }
  void setFn(String fn){
     firstname = fn;
  }
  void setLn(String In){
     lastname=In;
  }
  void setSal(double sal){
     if(salary<0){
       salary=0.0;
     }
     else{
       salary = sal;
     }
  String getFn(){
     return firstname;
```

```
}
  String getLn(){
    return lastname;
  }
  double getsal(){
    return salary;
  }
  double sal(int percent){
    salary+=salary*((percent/100.0));
    return salary;
  }
public class Main
       public static void main(String[] args) {
              Employee em1 = new Employee("ravi", "sankar", 40000);
              Employee em2 = new Employee("srinu","keerthi",50000);
              System.out.println(em1.getFn() + em1.getLn() +em1.getsal());
              System.out.println(em2.getFn() + em2.getLn() +em2.getsal());
              double s = em1.sal(10);
              System.out.println("Annual salary is " + (s*12));
              double s2 = em2.sal(15);
              System.out.println("Annual salary is " + (s2*12));
       }
}
OUTPUT:
$javac Main.java
$java -Xmx128M -Xms16M Main
ravisankar40000.0
srinukeerthi50000.0
Annual salary is 528000.0
Annual salary is 690000.0
```

2.Aim: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.

Program:

```
class Invoice{
  String partnumber;
  String partdescription;
  double price;
  int quantity;
  public Invoice(String pno,String pds,double rate,int qu){
     partnumber = pno;
     partdescription = pds;
     price = rate;
     quantity = qu;
     if(price<0){
       price=0.0;
    }
     else{
       price = rate;
     if(quantity<0){
       quantity=0;
     }
     else{
       quantity = qu;
     }
  void setPno(String pno){
     partnumber = pno;
  void setPds(String pds){
     partdescription = pds;
  void setPrice(double rate){
     if(price<0){
        price=0.0;
    }
     else{
        price = rate;
    }
  }
```

```
void setQu(int qu){
     if(quantity<0){
       quantity=0;
    }
    else{
       quantity = qu;
    }
  String getPno(){
     return partnumber;
  String getPds(){
     return partdescription;
  double getPrice(){
     return price;
  }
  int getQuant(){
     return quantity;
  double getInvoice(){
     return (price*quantity);
  }
}
public class Main
{
       public static void main(String[] args) {
               Invoice i = new Invoice("abc34","key board",120,4);
               System.out.println("the invoice is " + i.getPno() + " "+i.getPds()+"
"+i.getPrice()+" "+i.getQuant());
               double bill = i.getInvoice();
               System.out.println("the net amount is "+ bill );
       }
}
OUTPUT:
$javac Main.java
$java -Xmx128M -Xms16M Main
the invoice is abc34 key board 120.0 4
the net amount is 480.0
```