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Roll No.:- 25

Batch:- A1

Semester:-4th

Shift:- 1st

Section:- A

PRACTICAL-4

Solution:-

```java
package fourth;

import java.util.Scanner;

public class Person {
      String name;
      String address;
      String phoneno;

      public Person() {

      }

      public Person(String name,String address,String phoneno) {
            this.name=name;
            this.address=address;
            this.phoneno=phoneno;
      }

      public void display() {
            System.out.println("Name : "+this.name);
            System.out.println("Address : "+this.address);
            System.out.println("Phone Number : "+this.phoneno);
      }
}


public interface iowner {

      public double calEquity();
}
```

```java
public class Owner extends Person implements iowner {

    double money;
    double share;
    double equityAmt;

    public Owner() {

    }

    public Owner(Person p,double m,double s) {
        this.name=p.name;
        this.address=p.address;
        this.phoneno=p.phoneno;
        this.money=m;
        this.share=s;
        this.equityAmt=calEquity();
    }
    public double calEquity() {
        double amt;
        amt=(this.share*this.money)/100;
        return amt;
    }

    public void display() {
        System.out.println("Name : "+this.name);
        System.out.println("Address : "+this.address);
        System.out.println("Phone Number : "+this.phoneno);
        System.out.println("Money : "+this.money);
        System.out.println("Equity Share % : "+this.share);
        System.out.println("Equity Amount : "+this.equityAmt);
    }
}




public class Employee extends Person{
    int empno;
    String title;
    double basic;
    double gross;

    public Employee() {

    }

    public Employee(Person p,int e,String t,double b) {
        this.name=p.name;
        this.address=p.address;
        this.phoneno=p.phoneno;
        this.empno=e;
        this.title=t;
        this.basic=b;
        this.gross=calPay();
    }
```

```java
        public double calPay() {
                double amt;
                amt=this.basic+((10*this.basic)/100)+((50*this.basic)/100);
                return amt;
        }

        public void display() {
                System.out.println("Name : "+this.name);
                System.out.println("Address : "+this.address);
                System.out.println("Phone Number : "+this.phoneno);
                System.out.println("Employee Number : "+this.empno);
                System.out.println("Employee Title : "+this.title);
                System.out.println("Basic Salary : "+this.basic);
                System.out.println("Gross Salary : "+this.gross);
        }
}




public class Employee_Owner extends Employee implements iowner {
        double money;
        double share;
        double equityAmt;

        public Employee_Owner() {

        }

        public Employee_Owner(Employee e,Owner o) {
                this.name=e.name;
                this.address=e.address;
                this.phoneno=e.phoneno;
                this.empno=e.empno;
                this.title=e.title;
                this.basic=e.basic;
                this.gross=calPay();
                this.money=o.money;
                this.share=o.share;
                this.equityAmt=calEquity();
        }

        public double calPay() {
                double amt;
                amt=this.basic+((10*this.basic)/100)+((50*this.basic)/100);
                return amt;
        }

        public double calEquity() {
                double amt;
                amt=(this.money*this.share)/100;
                return amt;
        }

        public void display() {
                System.out.println("Name : "+this.name);
                System.out.println("Address : "+this.address);
```

```java
                System.out.println("Phone Number : "+this.phoneno);
                System.out.println("Employee Number : "+this.empno);
                System.out.println("Employee Title : "+this.title);
                System.out.println("Basic Salary : "+this.basic);
                System.out.println("Gross Salary : "+this.gross);
                System.out.println("Money : "+this.money);
                System.out.println("Equity Share % : "+this.share);
                System.out.println("Equity Amount : "+this.equityAmt);
        }

        public static void main(String[] args) {
                Scanner s=new Scanner(System.in);
                System.out.println("Enter the number of Persons : ");
                int n=s.nextInt();
                Person p[]=new Person[n];
                for(int i=0;i<n;i++) {
                        System.out.println("1. Basic Person");
                        System.out.println("2. Employee");
                        System.out.println("3. Owner");
                        System.out.println("4. Employee-Owner");
                        System.out.println("Please enter your choice : ");
                        int ch=s.nextInt();
                        switch(ch) {
                        case 1:{
                                System.out.println("Enter the name of the person : ");
                                String name=s.next();
                                System.out.println("Enter the Address of the person :
");
                                String add=s.next();
                                System.out.println("Enter the phone number of the
person : ");
                                String ph=s.next();
                                p[i]=new Person(name,add,ph);
                        }
                        break;
                        case 2:{
                                System.out.println("Enter the name of the Employee :
");
                                String name=s.next();
                                System.out.println("Enter the Address of the Employee :
");
                                String add=s.next();
                                System.out.println("Enter the phone number of the
Employee : ");
                                String ph=s.next();
                                System.out.println("Enter the Employee Number of the
Employee : ");
                                int en=s.nextInt();
                                System.out.println("Enter the Title of the Employee :
");
                                String til =s.next();
                                System.out.println("Enter the basic salary of the
Employee : ");
                                double bs=s.nextDouble();
                                Person p1=new Person(name,add,ph);
                                p[i]=new Employee(p1,en,til,bs);

                        }
                        break;
```

```java
                        case 3:{
                                System.out.println("Enter the name of the Owner : ");
                                String name=s.next();
                                System.out.println("Enter the Address of the Owner :
");
                                String add=s.next();
                                System.out.println("Enter the phone number of the Owner
: ");
                                String ph=s.next();
                                System.out.println("Enter the Money of the Owner : ");
                                Double mon=s.nextDouble();
                                System.out.println("Enter the Equity Share % of the
Owner : ");
                                Double esh=s.nextDouble();
                                Person p1=new Person(name,add,ph);
                                p[i]=new Owner(p1,mon,esh);
                        }
                        break;
                        case 4:{
                        System.out.println("Enter the name of the Employee-Owner : ");
                        String name=s.next();
                        System.out.println("Enter the Address of the Employee-Owner :
");
                        String add=s.next();
                        System.out.println("Enter the phone number of the Employee-
Owner : ");
                        String ph=s.next();
                        System.out.println("Enter the Employee Number of the Employee-
Owner : ");
                        int en=s.nextInt();
                        System.out.println("Enter the Title of the Employee-Owner :
");
                        String til =s.next();
                        System.out.println("Enter the basic salary of the Employee-
Owner : ");
                        double bs=s.nextDouble();
                        System.out.println("Enter the Money of the Employee-Owner :
");
                        Double mon=s.nextDouble();
                        System.out.println("Enter the Equity Shre % of the Employee-
Owner : ");
                        Double esh=s.nextDouble();
                        Person p1=new Person(name,add,ph);
                        Employee e1=new Employee(p1,en,til,bs);
                        Owner o1=new Owner(p1,mon,esh);
                        p[i]=new Employee_Owner(e1,o1);

                        }
                        break;
                        default:System.out.println("Error");
                }
                }
                for(int j=0;j<n;j++) {
                        System.out.println("Person "+(j+1)+" Details : ");
                        p[j].display();
                        System.out.println();
                }

        }
```
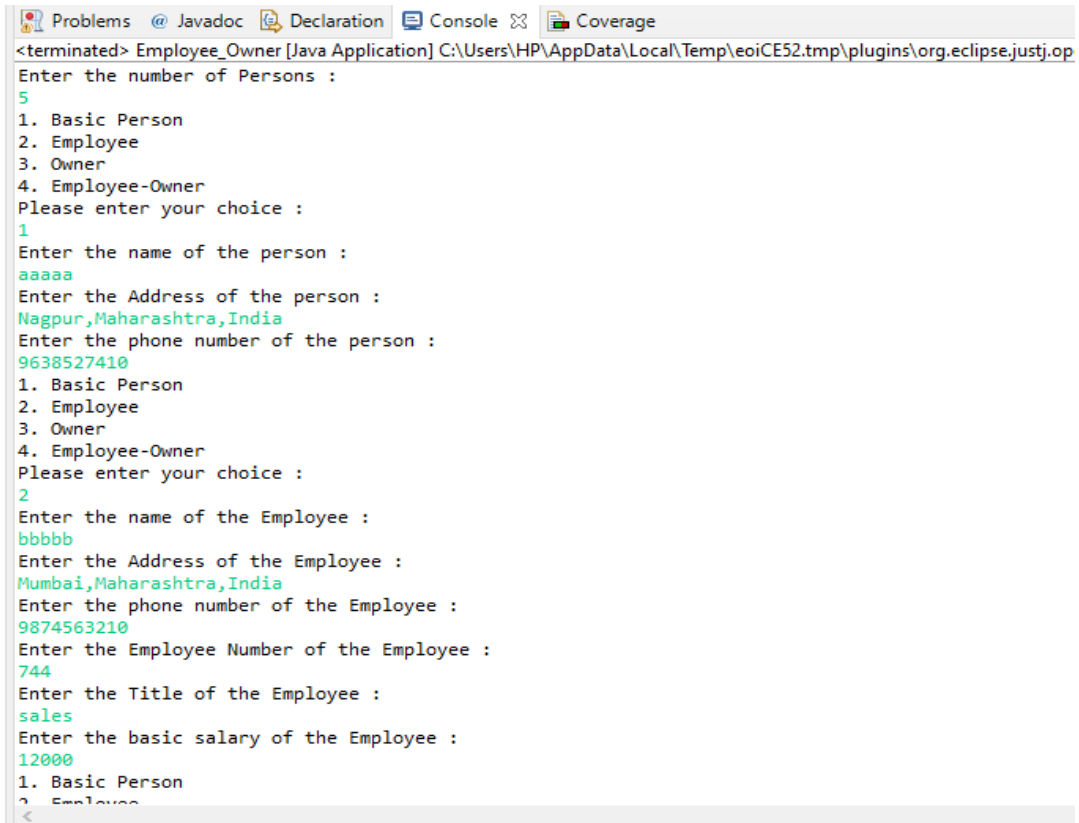
}

Output:-

```
Enter the number of Persons :
5
1. Basic Person
2. Employee
3. Owner
4. Employee-Owner
Please enter your choice :
1
Enter the name of the person :
aaaaa
Enter the Address of the person :
Nagpur,Maharashtra,India
Enter the phone number of the person :
9638527410
1. Basic Person
2. Employee
3. Owner
4. Employee-Owner
Please enter your choice :
2
Enter the name of the Employee :
bbbbb
Enter the Address of the Employee :
Mumbai,Maharashtra,India
Enter the phone number of the Employee :
9874563210
Enter the Employee Number of the Employee :
744
Enter the Title of the Employee :
sales
Enter the basic salary of the Employee :
12000
1. Basic Person
2. Employee
<
```

<terminated> Employee_Owner [Java Application] C:\Users\HP\AppData\Local\Temp\eoiCE52.tmp\plugins\org.eclipse.justj.o

```
Enter the basic salary of the Employee :
12000
1. Basic Person
2. Employee
3. Owner
4. Employee-Owner
Please enter your choice :
3
Enter the name of the Owner :
ccccc
Enter the Address of the Owner :
aaaaaaaaaaa,bbbbbbbbbbb
Enter the phone number of the Owner :
9874123658
Enter the Money of the Owner :
50000
Enter the Equity Share % of the Owner :
15
1. Basic Person
2. Employee
3. Owner
4. Employee-Owner
Please enter your choice :
4
Enter the name of the Employee-Owner :
ddddd
Enter the Address of the Employee-Owner :
ababababab,ababababab
Enter the phone number of the Employee-Owner :
7412369852
Enter the Employee Number of the Employee-Owner :
7412
Enter the Title of the Employee-Owner :
..
```

```
<terminated> Employee_Owner [Java Application] C:\Users\HP\AppData\Local\Temp\eoiCE52.tmp\plugins\org.eclipse.justj.op
Enter the Employee Number of the Employee-Owner :
7412
Enter the Title of the Employee-Owner :
Manager
Enter the basic salary of the Employee-Owner :
100000
Enter the Money of the Employee-Owner :
50000
Enter the Equity Shre % of the Employee-Owner :
20
1. Basic Person
2. Employee
3. Owner
4. Employee-Owner
Please enter your choice :
2
Enter the name of the Employee :
eeeee
Enter the Address of the Employee :
hhhhhhhdhdhdhdh,lkkjsjjsjsj
Enter the phone number of the Employee :
7539518426
Enter the Employee Number of the Employee :
754
Enter the Title of the Employee :
security
Enter the basic salary of the Employee :
60000
Person 1 Details :
Name : aaaaa
Address : Nagpur,Maharashtra,India
Phone Number : 9638527410

Person 2 Details :
```

```
<terminated> Employee_Owner [Java Application] C:\Users\HP\AppData\Local\Temp\eoiCE52.tmp\plugins\org.eclipse.justj.openjdk.hotspot.jre.r
Person 1 Details :
Name : aaaaa
Address : Nagpur,Maharashtra,India
Phone Number : 9638527410

Person 2 Details :
Name : bbbbb
Address : Mumbai,Maharashtra,India
Phone Number : 9874563210
Employee Number : 744
Employee Title : sales
Basic Salary : 12000.0
Gross Salary : 19200.0

Person 3 Details :
Name : ccccc
Address : aaaaaaaaaaa,bbbbbbbbbbb
Phone Number : 9874123658
Money : 50000.0
Equity Share % : 15.0
Equity Amount : 7500.0

Person 4 Details :
Name : ddddd
Address : abababab,abababab
Phone Number : 7412369852
Employee Number : 7412
Employee Title : Manager
Basic Salary : 100000.0
Gross Salary : 160000.0
Money : 50000.0
Equity Share % : 20.0
Equity Amount : 10000.0
```

Employee Title : sales
Basic Salary : 12000.0
Gross Salary : 19200.0

Person 3 Details :
Name : ccccc
Address : aaaaaaaaaaa,bbbbbbbbbbb
Phone Number : 9874123658
Money : 50000.0
Equity Share % : 15.0
Equity Amount : 7500.0

Person 4 Details :
Name : ddddd
Address : abababababab,abababababab
Phone Number : 7412369852
Employee Number : 7412
Employee Title : Manager
Basic Salary : 100000.0
Gross Salary : 160000.0
Money : 50000.0
Equity Share % : 20.0
Equity Amount : 10000.0

Person 5 Details :
Name : eeeee
Address : hhhhhhhdhdhdhdh,lkkjsjjsjsj
Phone Number : 7539518426
Employee Number : 754
Employee Title : security
Basic Salary : 60000.0
Gross Salary : 96000.0