

EX NO: 1	ELECTRICITY BILL
DATE: 08/08/2019	

AIM:

To develop a java application to generate electricity bill and consumer number ,consumer name ,previous month reading , current month reading and type of EB connection and display the result

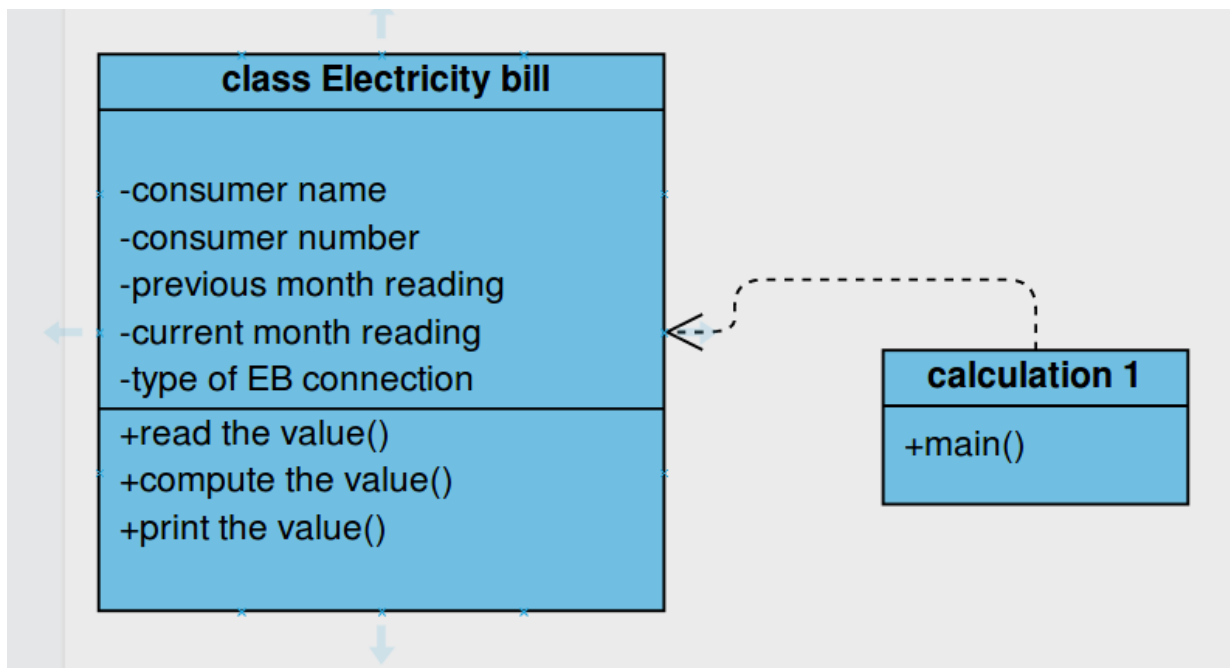
REQUIREMENT:

- Create a class electricity bill with following
- Data members: consumer number , consumer name , previous month reading ,current month reading and type of EB bill of EB connection
- member function: read the value ,compute the value ,print the value

ALGORITHM:

- step1: Declare the class electricity bill with customer name ,customer number previous month reading ,type EB connection ,previous month reading
- step2: declare the constructor to pass the initial attributes
- step3: declare the constructor to with main function
- step4: create objects consumer name,consumer number ,previous month reading
- step5: get the data
- step6: go for calculation
- step7:display the result

CLASS DIAGRAM:



PROGRAM

```

//CREATED BY
//A SUGUMAR
package electricitybill
import java.util.Scanner;
public class ElectricityBills {
    private long customernumber;
    private String customername;
    private long previousmonthreading;
    private long currentmonthreading;
    private String customertype;

    public ElectricityBills()
    {
        this.customernumber=1001;
        this.customername="unknown";
        this.previousmonthreading=100;
        this.currentmonthreading=120;
        this.customertype="domestic";
    }

    public ElectricityBills(long number,String name,long reading1,long reading2,String type)
    {
        this.customernumber=number;
        this.customername=name;
        previousmonthreading=reading1;
        currentmonthreading=reading2;
        customertype=type;
    }

    public void getdata()
    {
        Scanner sc=new Scanner(System.in);
        System.out.printf("\n%40s", "BILLING INFORMATION");
        System.out.print("\nEnter the customernumber:");
        this.customernumber=sc.nextLong();
        System.out.print("Enter the customername:");
        this.customername= sc.next();
        System.out.print("Enter the Previous Month Reading:");
        previousmonthreading=sc.nextLong();
        System.out.print("Enter the Current Month Reading:");
        currentmonthreading=sc.nextLong();
        System.out.print("Enter the Customer type (Domestic,Commercial):");
        customertype=sc.next();
    }

    public void printData()
    {
        System.out.println("CustomerNumber:"+customernumber);
        System.out.println("CustomerName:"+customername);
        System.out.println("PreviousMonthReading:"+previousmonthreading);
        System.out.println("CurrentMonthReading:"+currentmonthreading);
        System.out.println("Customertype:"+customertype);
    }
}

```

```

public void computeBillamount()
{
    long unit=currentmonthreading-previousmonthreading;
    double billAmount;
    billAmount=0;
    String
spacing="-----";

    if(customertype.equals("Domestic"))
    {
        if((unit>=0)&& (unit<=100))
        {
            billAmount=unit*1.0;
        }else if((unit>=101)&&(unit<=200))
        {
            billAmount=unit*2.50;
        }else if((unit>=201)&&(unit<=500))
        {
            billAmount=unit*4.0;
        }else
        {
            billAmount=unit*6.0;
        }
    }else if(customertype.equals("Commercial"))
    {

        if((unit>=0)&& (unit<=100))
        {
            billAmount=unit*2.0;
        }else if((unit>=101)&&(unit<=200))
        {
            billAmount=unit*4.50;
        }else if((unit>=201)&&(unit<=500))
        {
            billAmount=unit*6.0;
        }else
        {
            billAmount=unit*7.0;
        }
    }
    System.out.print("\n"+spacing+"\n");
    System.out.printf("%40s", "SALE BILL");
    System.out.print("\n"+spacing+"\n");
    this.printData();
    System.out.printf("%29s%8.2f Rs", "Total Amount:",billAmount);
    System.out.print("\n"+spacing+"\n");
}
}

```

CALCULATION

```

package electricitybills;

public class Calculationforbillings {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        ElectricityBills E1,E2;
        E1=new ElectricityBills(1001,"Arun",90,110,"Domestic");
        E1.printData();
        E2=new ElectricityBills();
        E2.getdata();
        E1.computeBillamount();
        E2.computeBillamount();
    }

}

```

OUTPUT

```

CustomerNumber:1001
CustomerName:Arun
PreviousMonthReading:90
CurrentMonthReading:110
Customertype:Domestic

```

BILLING INFORMATION

```

Enter the customernumber:22121
Enter the customername:sugumar
Enter the Previous Month Reading:23322
Enter the Current Month Reading:2322
Enter the Customer type (Domestic,Commercial):
Domestic

```

```

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-----

```

SALE BILL

```

-----
-----

```

```

CustomerNumber:1001
CustomerName:Arun
PreviousMonthReading:90
CurrentMonthReading:110
Customertype:Domestic

```

Total Amount: 20.00 Rs

```

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```

```

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-----

```

SALE BILL

CustomerNumber:22121
CustomerName:sugumar
PreviousMonthReading:23322
CurrentMonthReading:2322
Customertype:Domestic
Total Amount:-126000.00 Rs

RESULT

Thus the java application is generated sucessfully