

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

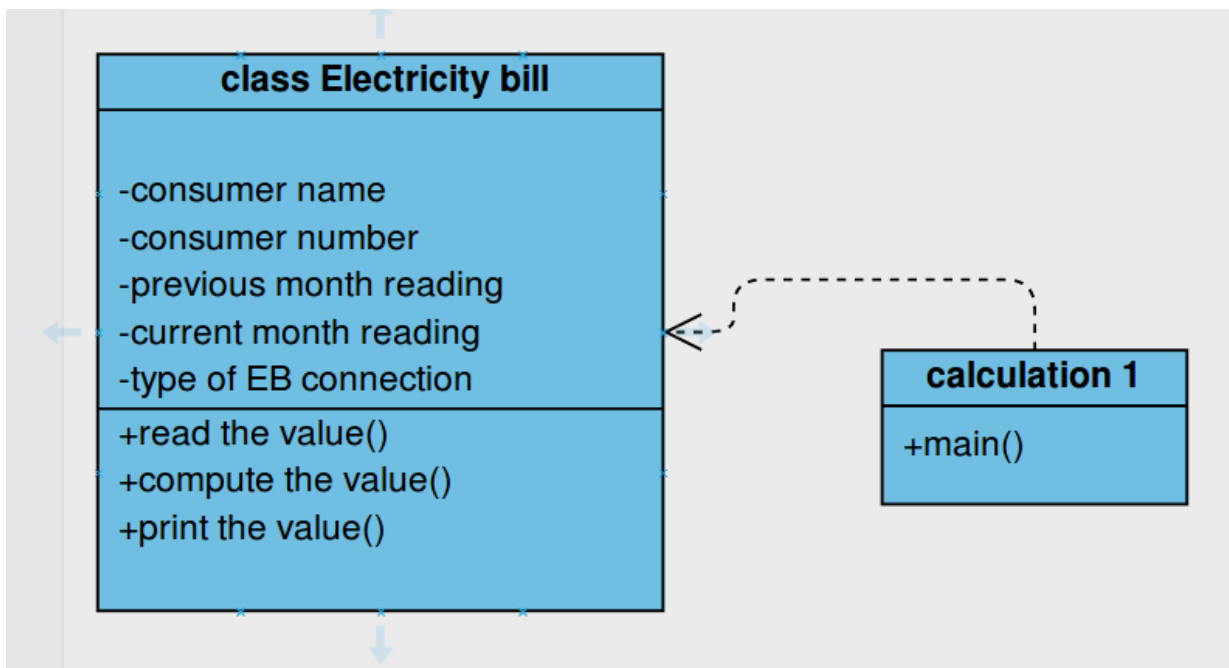
REQUIREMENT:

- 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:

```

/**
 * EXPERIMENT-01
 * developed by Nithishkumar
 * Saveetha Engineering College
 * jpnithishkumar@gmail.com
 */
package electricitybills;
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");
    }
}

/**
 * EXPERIMENT-01
 *developed by Nithishkumar
 *Saveetha Engineering College
 *jpnithishkumar@gmail.com
 */
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:5042
Enter the customername:Nithish
Enter the Previous Month Reading:250
Enter the Current Month Reading:480
Enter the Customer type (Domestic,Commercial):Domestic

```

SALE BILL

CustomerNumber:1001

CustomerName:Arun

PreviousMonthReading:90

CurrentMonthReading:110

Customertype:Domestic

Total Amount: 20.00 Rs

SALE BILL

CustomerNumber:5042

CustomerName:Nithish

PreviousMonthReading:250

CurrentMonthReading:480

Customertype:Domestic

Total Amount: 920.00 Rs

RESULT:

Thus the java application is generated successfully.