

# ELECTRICITY BILL

**Aim:** To develop a java code application to print electrical bill

## Requirement :

- Develop a java application to create a package billings and to create a class electricity bill with data members .consumer no, consumer name, previous month reading, current month reading, type of eb connection member function :get data, print data, compute bill amount and constructors
- Create a class calculations with main functions, create object of e bills, get data and display the bill amount by calling compute bill amount() function.

## Algorithm:

**Step1:** Declare a package electricity bills

**Step2:** Declare a class name of electricity bills.

**Step3:** Declare a constructor with initial attributes.

**Step4:** Declare get data member and member function.

**Step5:** Declare a class calculation with a static main function.

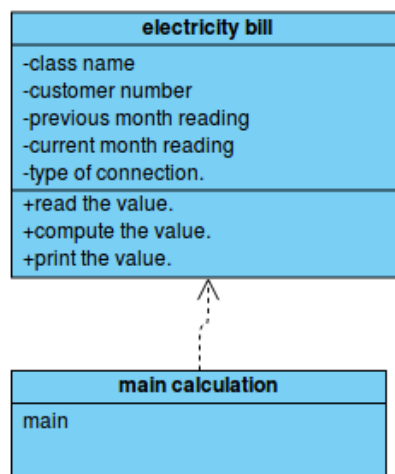
**Step6:** Create an object by with consumer name, consumer number, previous month reading, present month reading.

**Step7:** Get the input from user.

**Step8:** Calculate the total electricity bill.

**Step9:** Display result.

## Class diagram:



## JavaProgramme:

### /Experiment-01

//created by

//guru sai

```
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="noname";
```

```
        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.billing.java-1
package electricitybills;

public class Calculationforbillings {

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

}

```

## output:

```

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

```

## BILLING INFORMATION

```

Enter the customernumber:1001
Enter the customername:a
Enter the Previous Month Reading:90
Enter the Current Month Reading:110
Enter the Customer type (Domestic,Commercial):domestic

```

-----

----

## SALE BILL

-----

----

```

CustomerNumber:1001
CustomerName:A
PreviousMonthReading:90
CurrentMonthReading:110
Customertype:Domestic
                Total Amount:    20.00 Rs

```

-----

----

-----

----

## SALE BILL

-----

----

```

CustomerNumber:1001
CustomerName:a

```

PreviousMonthReading:90  
CurrentMonthReading:110  
Customertype:domestic  
Total Amount: 0.00 Rs

---

**Result:**

As per requirement electricity bill is generated with previous and current month reading by using java programme.

