EX.NO.1	ELECTRICITY BILL
08-07-19	

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 memebers .consumer no, consumer name, previous month reading, current month reading,tyoe of eb connection member function :get data, print data,compute bill amount and constructors
- Dreate 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 intial attributes.
Step4: Declare get data member and member function.
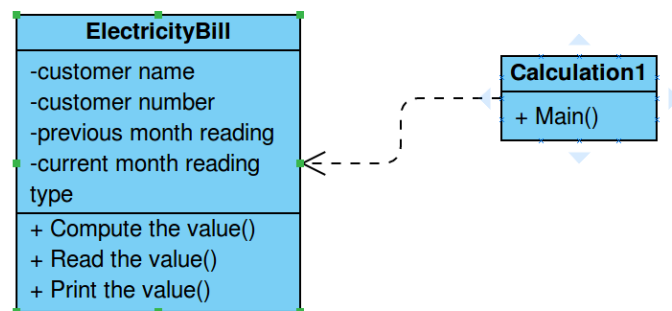**Step5:** Declare a class calculation with a statiuc main function.
Step6: Cretae a object by with consumer name, consumer number, previous month reading,present month reading.
Step7: Get the input from user.
Step8: Calculate the total electricity bill.
Step9: Display result.

Class diagram:

JavaProgramme:
/Experiment-01
//created by
//Santhosh

```java
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);
```

```java
    }
    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();
```

```java
            System.out.printf("%29s%8.2f Rs", "Total Amount:",billAmount);
             System.out.print("\n"+spacing+"\n");
        }
         }
```

calculation.billing.java-1

```java
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:

Hence as per requirement ElectricityBill is generated with previous month and current month month reading by using java programme.