

EX-01	<b>ELECTRICITY BILL</b>
DATE :	

## AIM

To design and develop a java console application to generate electricity bill and to create a package billings and to create a class electricity bill with the following members. Consumer no.consumer name,previous month reading ,current month reading.

## REQUIREMENT

create a class Electricity bills with the following data members:consumer no,consumer name, previous month reading,current month reading and type of eb connection

member function: Read the value,compute the value,print the value.

## ALGORITHM

step1: Declare a package billings

step2:Declare a class name Electricity Bills

step3:Declare a construction with initial attribute

step4:Declare a data member and a member function

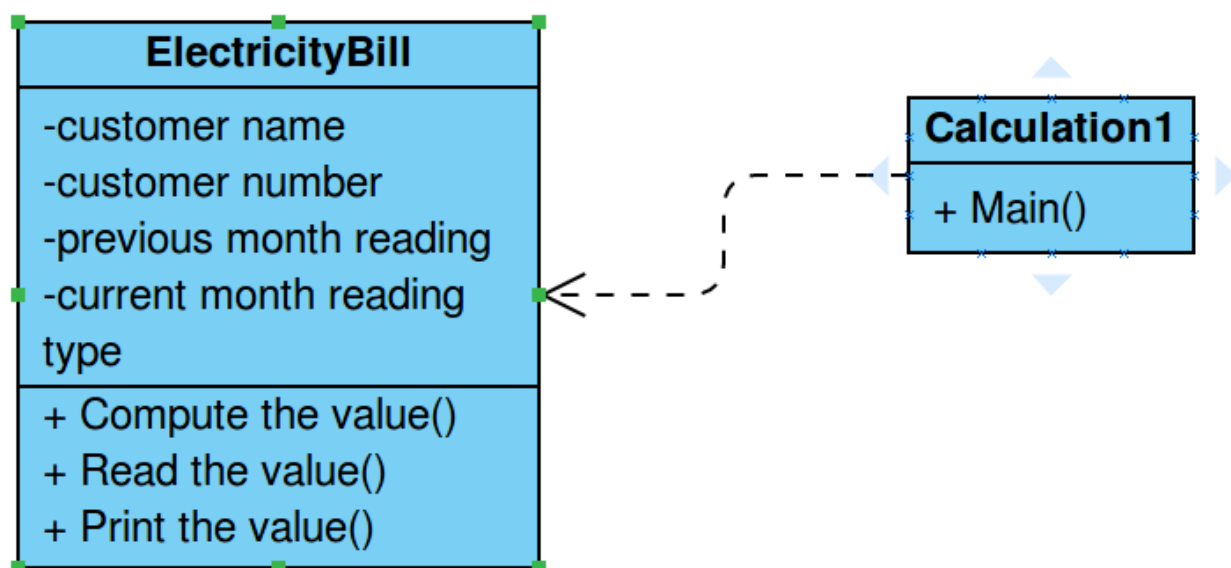
step5:Declare a class calculation1 with static main function

step6:create object or a type with customer name, customer no, previous month reading, current reading,customer type(domestic or commercial)

step7:get the input from user

step8:calculate the total electricity bill

step9:display result



# PROGRAMME:

## ElectricityBill.java

```
package billings;
import java.util.Scanner;
import java.util.Scanner;
/**
 * Electricity bill
 * @author mahesh
 *
 */
public class ElectricityBill {
    private long customernumber;
    private String customername;
    private double previousmonthreading;
    private double currentmonthreading;
    private String customertype;

    /**
     * to create electricity bill with initial values
     *
     */
    public ElectricityBill()
    {
        this.customernumber=1000;
        this.customername="unknown";
        this.currentmonthreading=0;
        this.previousmonthreading=0;
        this.customertype="Domestic";
    }
    public ElectricityBill(long number,String name,double c_reading,double p_reading,String
type)
    {
        this.customernumber=number;
        this.customername=name;
        double c_rating;
        currentmonthreading=c_reading;
        previousmonthreading=p_reading;
        customertype=type;
    }
    /**
     * to get bill information from the user
     */
    public void getData()
    {
        Scanner sc=new Scanner(System.in);

        System.out.printf("\n%40s","BILLING INFORMATION");
        System.out.print("\nEnter the customer number:");
```

```

this.customernumber=sc.nextLong();
System.out.print("Enter the customer name:");
customername= sc.next();
System.out.print("Enter the current month reading:");
currentmonthreading=sc.nextDouble();
System.out.print("Enter the previous month reading");
previousmonthreading=sc.nextDouble();
System.out.print("Enter the customer type (Domestic or Commercial):");
customertype=sc.next();

```

```

}
/**
 * to print the bill details
 */
public void printData()
{
    System.out.printf("%-40s%40s\n", "Customer
Number:"+customernumber,"CustomerName:"+customername);
    System.out.printf("%s%8.2f %s%8.2f %-16s %40s\n", "current month
reading:",currentmonthreading,"previous month
reading:",previousmonthreading,"CustomerType:",customertype);

}
/**
 * to get the total amount
 */
public void computeBillAmount()
{
    double totalAmount=-1;
    double unitsconsumed;
    String divider="-----";

unitsconsumed=currentmonthreading-previousmonthreading;
    if(customertype.equals("Domestic"))
    {
        if((unitsconsumed>=0)&& (unitsconsumed<=100))
        {
            totalAmount=unitsconsumed*1.0;
        }else if((unitsconsumed>=101)&&(unitsconsumed<=200))
        {
            totalAmount=unitsconsumed*2.50;
        }else if((unitsconsumed>=201)&&(unitsconsumed==500))
        {
            totalAmount=unitsconsumed*4.0;
        }else
        {
            totalAmount=unitsconsumed*6.0;
        }
    }
}

```

```

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

```

Calculation1.java

**package** billings;

```

public class Calculation1 {
    public static void main(String[] args) {
        ElectricityBill bill1,bill2;

        bill1=new ElectricityBill(2001,"Kamal",0,0,"Domestic");
        bill1.printData();
        bill2=new ElectricityBill();
        bill2.getData();
        bill1.computeBillAmount();
        bill2.computeBillAmount();
    }
}

```

## OUTPUT:

customer number:2001	customer name: kamal
current month reading:0	previous month reading:0
customer type:Domestic	

---

BILLING INFORMATION

Enter the customer number: 47655  
Enter the customer name: Mahesh  
Enter the current month reading: 899  
Enter the previous month reading:675  
Enter the customer type(Domestic or Commercial):Commercial

---

### ELECTRICITY BILL

---

customer number=2001                      customer name:kamal  
current month reading:0                  previous month reading:0  
customer type: Domestic

Total amount:0.00 Rs

---

---

### ELECTRICITY BILL

---

customer number:47655                  customer name:mahesh  
current month reading:899              previous month reading:675

customer type:Commercial

Total amount:1344 Rs

## RESULT:

Thus a java console application is developed to find Electricity Bill

