

EX NO: 1	ELECTRICIY BILL GENERATION
DATE : 08/07/2019	

AIM:

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

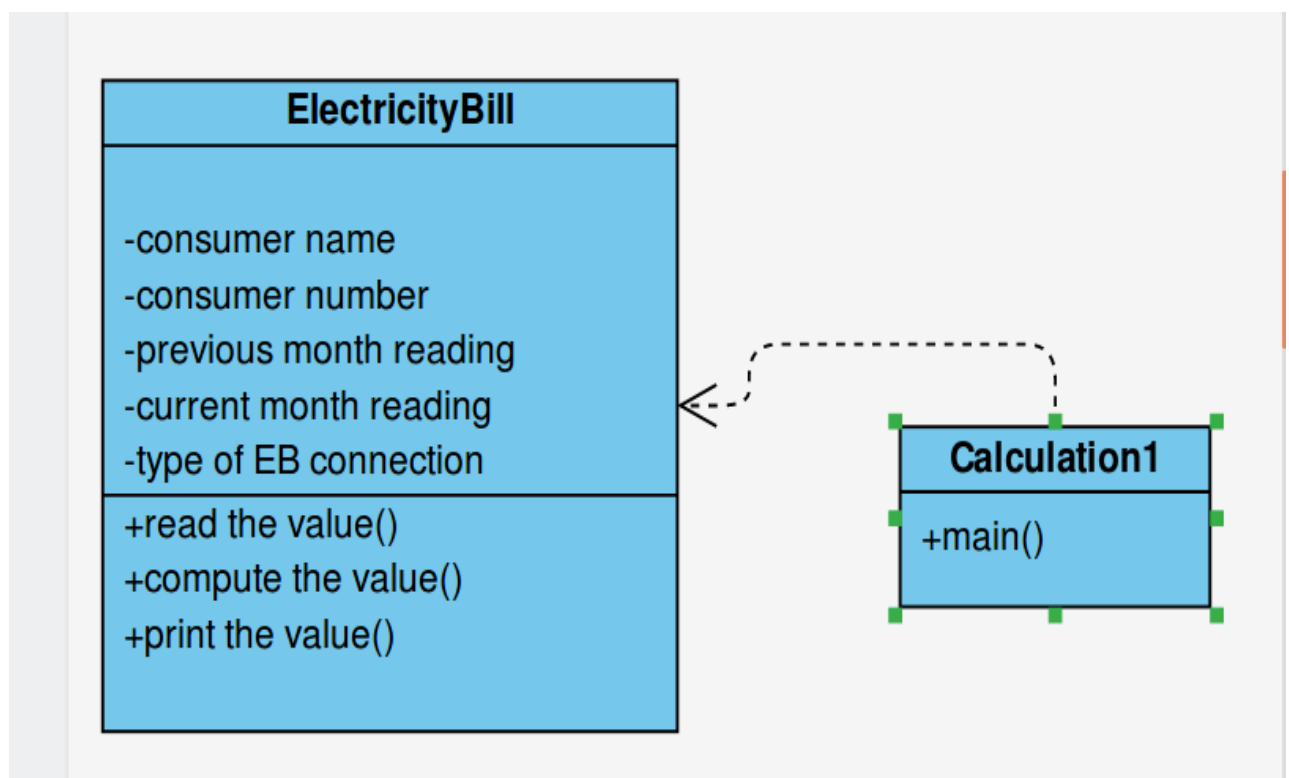
REQUIREMENT:

- create a class electricity bills with the following
- data members : consumer number ,consumer name,previous month reading ,current month reading and tpe of EB connection
- member function : read the value ,compute the value,print the value

ALGORITHM:

- step 1 : declare the class electricity bill with consumer number ,consumer name ,previous month reading,type of EB connection ,current month raeading
- step 2 :declare the constructor to pass the intitial attributes
- step 3 :declare the constructors with main function
- step 4 :create objects consumer name ,previous month reading
- step 5 :get the data
- step 6 :go for calculation
- step 7 :display the Ebill

CLASS DIAGRAM:



PROGRAM:

calculation1.java

```
****
* Program for electricity bill

* @author tamilselvan
* tamilfreakz002@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,"Raja",90,110,"Domestic");
        E1.printData();
        E2=new ElectricityBills();
        E2.getdata();
        E1.computeBillamount();
        E2.computeBillamount();
    }

}
```

Electricitybill.java

```
* Program for electricity bill
* @author tamilselvan
* tamilfreakz002@gmail.com
*/
package electricitybills;
import java.util.Scanner;
public class ElectricityBills {
    private long consumernumber;
    private String consumername;
    private long previousmonthreading;
    private long currentmonthreading;
    private String consumertype;

    public ElectricityBills()
    {
        this.consumernumber=1001;
        this.consumername="unknown";
        this.previousmonthreading=100;
        this.currentmonthreading=120;
```

```

this.consumertype="domestic";
}

public ElectricityBills(long number,String name,long reading1,long reading2,String type)
{
this.consumernumber=number;
this.consumername=name;
previousmonthreading=reading1;
currentmonthreading=reading2;
consumertype=type;
}
public void getdata()
{
Scanner sc=new Scanner(System.in);
System.out.printf("\n%40s","BILLING INFORMATION");
System.out.print("\nEnter the consumernumber:");
this.consumernumber=sc.nextLong();
System.out.print("Enter the consumername:");
this.consumername= 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 consumer type (Domestic,Commercial):");
consumertype=sc.next();
}
public void printData()
{
System.out.println("consumerNumber:"+consumernumber);
System.out.println("consumerName:"+consumername);
System.out.println("PreviousMonthReading:"+previousmonthreading);
System.out.println("CurrentMonthReading:"+currentmonthreading);
System.out.println("consumertype:"+consumertype);
}
public void computeBillamount()
{
long unit=currentmonthreading-previousmonthreading;
double billAmount;
billAmount=0;
String spacing="-----";

if(consumertype.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(consumertype.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");
}
}

```

OUTPUT:

```

consumerNumber:1001
consumerName:Raja
PreviousMonthReading:90
CurrentMonthReading:110
consumertype:Domestic

```

BILLING INFORMATION

```

Enter the consumernumber:5050
Enter the consumername:Rose
Enter the Previous Month Reading:25
Enter the Current Month Reading:30
Enter the consumer type (Domestic,Commercial):Domestic

```

SALE BILL

```

consumerNumber:1001
consumerName:Raja

```

PreviousMonthReading:90
CurrentMonthReading:110
consumertype:Domestic
Total Amount: 20.00 Rs

SALE BILL

ConsumerNumber:5050
ConsumerName:Rose
PreviousMonthReading:25
CurrentMonthReading:30
consumertype:Domestic
Total Amount: 5.00 Rs

RESULT:

thus the generation of electricity bill,the java program is created and executed