

EXP NO:01	GENERATE ELECTRICITY BILL
DATE:08.07.19	

AIM:

To develop a java application to generate electricity bill.

Requirement:

Create a class electricity bills with following data member

- 1.Consumer number
- 2.Consumer name
- 3.Previous Month Readings
- 4.Current Month Readings
- 5.Type of EB connection

ALGORITHM:

Step1: Declare a package Electricity Bill

Step2: Declare a class name Electricity Bill

Step3: Declare a constructor with initial attribute

Step4: Declare get data member and member function

Step5: Declare classn caculation 1 with a static main functon

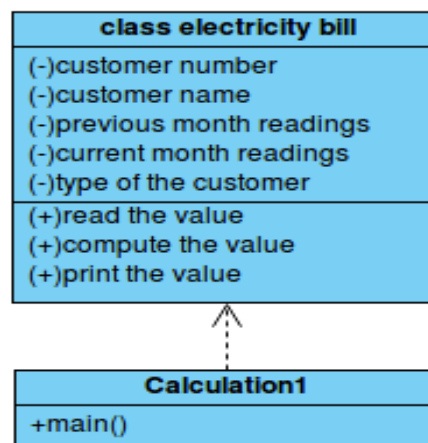
Step6: Create object of type with consumer name,consumer number,previous month readings, current month readings

Step7: Get the input from user

Step8: Calculate the total Eelectricity Bill

Step9: Display result

CLASS DIAGRAM:



PROGRAM:

```

/*****
 * Program for Electricity Bill
 * @author RAJAMANICKAM A
 * rajapandidevi1997@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");
    }
}

```

```

\****
* Program for Electricity Bill
* @author RAJAMANICKAM A
* rajapandidevi1997@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,"pavan",90,110,"Domestic");
        E1.printData();
        E2=new ElectricityBills();
        E2.getdata();
        E1.computeBillamount();
        E2.computeBillamount();
    }

}

```

OUTPUT:

CustomerNumber:1001

CustomerName:RAJA
 PreviousMonthReading:90
 CurrentMonthReading:110
 Customertype:Domestic

BILLING INFORMATION

Enter the customernumber:7894
 Enter the customername:ROSI
 Enter the Previous Month Reading:25
 Enter the Current Month Reading:30
 Enter the Customer type (Domestic,Commercial):DOMESTIC

```

-----
-----
                                SALE BILL
-----
-----
CustomerNumber:1001
CustomerName:RAJA
PreviousMonthReading:90
CurrentMonthReading:110
Customertype:Domestic
                                Total Amount:    20.00 Rs
-----
-----
-----
-----

```

SALE BILL

CustomerNumber:7894

CustomerName:ROSI

PreviousMonthReading:25

CurrentMonthReading:30

Customertype:DOMESTIC

Total Amount: 5.00 Rs

Result:

Thus Generate Electricity Bill is successfully created by Java program.

