Exno:1
Date:08-07-2019

ELECTRICITY BILL GENERATION

AIM:

To develop a Java Console application to generate Electricity Bill.

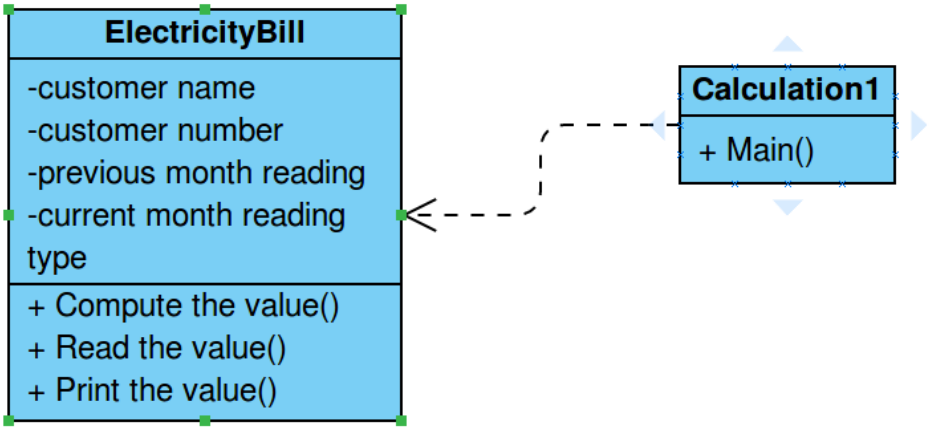
REQUIREMENT:

Develop a Java Application to create a package billings and to create a class Electricity Bill with datamembers,consumernumber,consumername,previousmonthreading,currentmonthreading,type of EB connection
Member functtions: Set Data,PrintData,compute BillAmount constructors.
Create a class calculation with main function create objects of Ebill Class,set the data and display the bill amount by calling compute BillAmount()functions.

ALGORITHM:

1) Declare a package billings.
2) Declare class name.
3) Declare constructors with initial value of attribute.
4) get the Data from the user
5) Declare Functions compute BillAmount with Implementation.
6) Display results.

CLASS DIAGRAM:



PROGRAM:

```
/**
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*/
package billings;

import java.util.Scanner;

public class ElectrictyBill {
	private int customernumber;
    private String customername;
    private double previousmonthreading;
    private double currentmonthreading;
    private String customertype;


    public ElectrictyBill()
    {
	this.customernumber=1000;
	this.customername="unknown";
	this.previousmonthreading=0;
	this.currentmonthreading=0;
	this.customertype="domestic";

    }
    public ElectrictyBill (int number,String name,double pmt,double cmt,String type)
    {
	this.customernumber=number;
	this.customername=name;
	this.previousmonthreading=pmt;
```

```
        this.currentmonthreading=cmt;
        this.customertype=type;
}
public void getData()
        {
                Scanner sc=new Scanner(System.in);

                System.out.printf("\n%40s","BILLING INFORMATION");
                System.out.print("Enter the customer number");
                customernumber=sc.nextInt();
                System.out.print("Enter the customer name:");
                customername= sc.next();
                System.out.print("Enter the pmt");
                previousmonthreading=sc.nextDouble();
                System.out.print("Enter the cmt");
                currentmonthreading=sc.nextDouble();
                System.out.print("Enter the customer type (domestic or commercial)");
                customertype=sc.next();
        }
public void printData()
        {
                System.out.printf("%-40s%40s\n", "Customer
Number:"+customernumber,"CustomerName:"+customername);
                System.out.printf("%s%8.2f %-16s %40s\n", "Previous month
Reading:",previousmonthreading,"Watts","Current Month
Reading:",currentmonthreading,"Watts");
                System.out.printf("%-40s", "Customer Type:",customertype);
        }

public void computeBillAmount()
{
                double totalAmount=-1;
                double unitsconsumed=currentmonthreading-previousmonthreading;
                String divider="-------------------------------------------------";

                if(customertype.equals("domestic"))
                {
                        if((unitsconsumed>=0)&& (unitsconsumed<=100))
                        {
                                totalAmount=unitsconsumed*1;
                        }else if((unitsconsumed>=101)&&(unitsconsumed<=200))
                        {
                                totalAmount=unitsconsumed*2.50;
                        }else if((unitsconsumed>=201)&&(unitsconsumed<=500))
                        {
                                totalAmount=unitsconsumed*4;
                        }else
                        {
                                totalAmount=unitsconsumed*6;
                        }
                }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;
                        }else
                        {
                                totalAmount=unitsconsumed*7;
                        }
                }
                System.out.print("\n"+divider+"\n");
                System.out.printf("%40s", "SALE 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");
    }

}
```

Calculation.java

```
package billings;

public class Calculation1 {

        public static void main(String[] args) {
                // TODO Auto-generated method stub

                ElectrictyBill bill1,bill2;

                bill1=new ElectrictyBill (2001,"yogeeswaran",123.0,134.0,"Domestic");
                bill1.printData();
                bill2=new ElectrictyBill ();
                bill2.getData();
                bill1.computeBillAmount();
                bill2.computeBillAmount();
        }

}
```

OUTPUT:

BILLING INFORMATION

```
Enter the customer number:2001
Enter the customer name:yogeeswaran
Enter the current month reading:123.0
```

Enter the previous month reading:134.0
Enter the type:Domestic

Electricity BILL

CustomerNumber:2001
CustomerName:yogeeswaran
Current month Reading: 123.00
Previous Month Reading: 134.00
CustomerType: Domestic
Total Amount: 11

RESULT:

Here as per the requirement electricity bill is generated with previous and current month reading by using Java program.