

EX NO:1

DATE:

ELECTRICITY BILL

AIM:

To develop a java console application to generate electricity bill with consumer no, consumer name, previous month reading and present month reading and EB type connection and display the result.

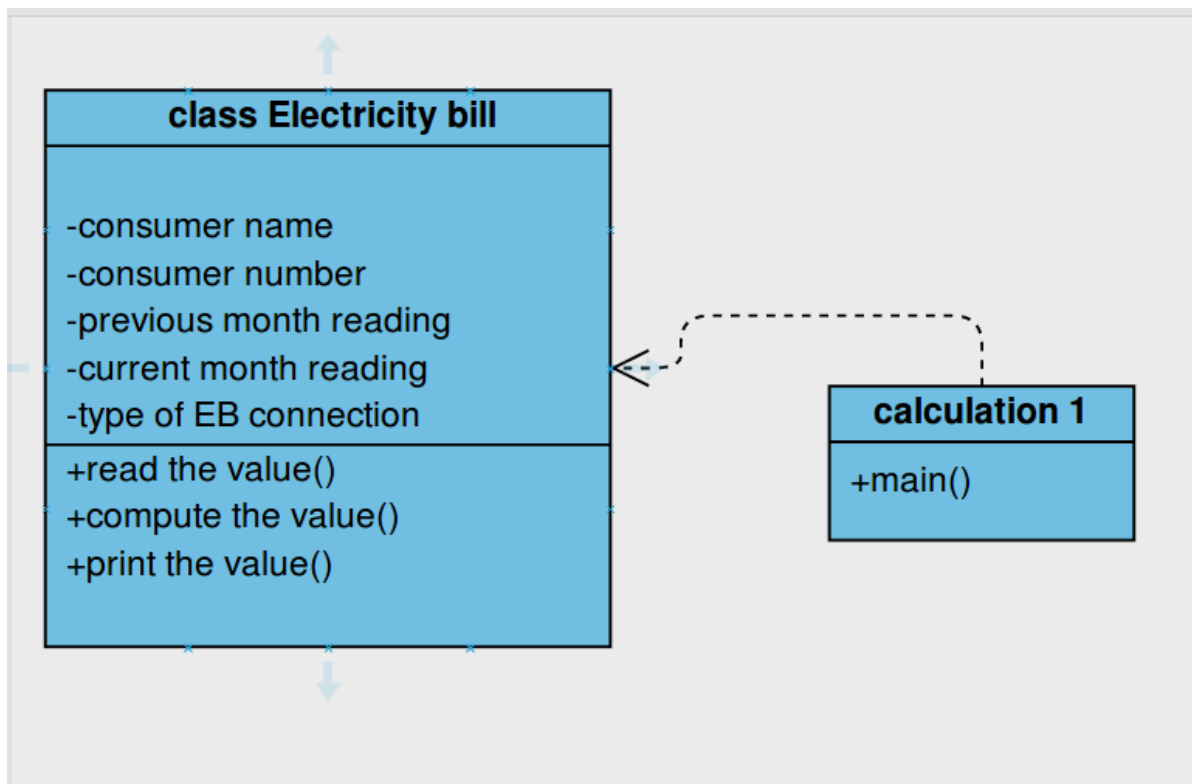
REQUIREMENT:

Create a class electricity bill with the following data member, customername, previous month reading, current month reading and type of EB connection, member function: read the value, compute the value, print the value.

ALGORITHM:

- STEP 1: Declare a package electricity bills.
- STEP 2: Declare a class name of electricity bills.
- STEP 3: Declare a construction with initial attribute.
- STEP 4: Declare get data member and member function.
- STEP 5: Declare class calculation, with a static main function.
- STEP 6: Create object by with consumer name, consumer no, previous month reading, present month reading.
- STEP 7: Get input from user.
- STEP 8: Calculation thw total eclectricity bill.
- STEP 9 :Display result.

CLASS DIAGRAM:



PROGRAM:

```
/**
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*/
package elecricitybills;
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:");
```

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        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");
}
}

```

CALCULATION:

```

package electricitybills;

public class Calculationforbillings {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        ElectricityBills E1,E2;
        E1=new ElectricityBills(1001,"Arun",90,110,"Domestic");
        E1.printData();
        E2=new ElectricityBills();
        E2.getdata();
        E1.computeBillamount();
        E2.computeBillamount();
    }

}

```

OUTOUT:

CustomerNumber:1001
CustomerName:Arun
PreviousMonthReading:90
CurrentMonthReading:110
Customertype:Domestic

BILLING INFORMATION

Enter the customernumber:34
Enter the customername:456
Enter the Previous Month Reading:123
Enter the Current Month Reading:321
Enter the Customer type (Domestic,Commercial):Domestic

SALE BILL

CustomerNumber:1001
CustomerName:Arun
PreviousMonthReading:90
CurrentMonthReading:110
Customertype:Domestic
Total Amount: 20.00 Rs

SALE BILL

CustomerNumber:34
CustomerName:456
PreviousMonthReading:123
CurrentMonthReading:321
Customertype:Domestic
Total Amount: 495.00 Rs

RESULT:

Thus the java application is generated successfully.