

EX NO:

DATE:

JAVA APPLICATION FOR ELECTRICITYBILL

AIM:

To develop java application to generate electricitybill and consumer number, consumer name, previous month reading, current month reading and the type of EB connection and display the result.

REQUIRMENT:

To develop java application to generate electricitybill and consumer number, consumer name, previous month reading, current month reading and the type of EB connection.

Create a class Electricity Bills with the following,

Data members: consumer number, 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 electricitybills.

STEP2: Declare a class name ElectricityBills.

STEP3: Declare a constructor with initial attribute.

STEP4: Declare get data member and member function.

STEP5: Declare class calculation1 with a member function.

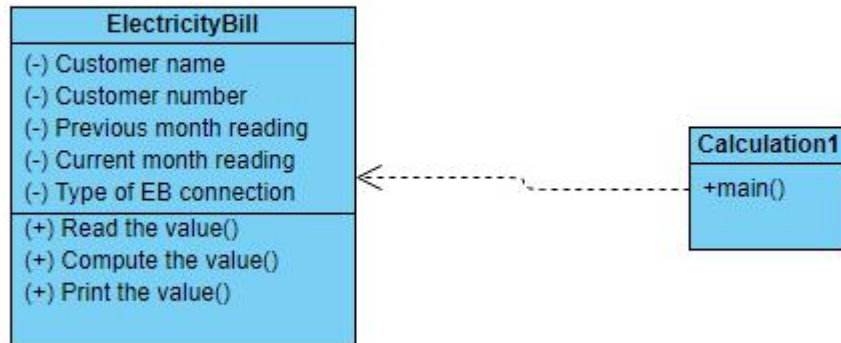
STEP6: Crete object of type with consumer name, month reading, current month reading.

STEP7: Get the input from user.

STEP8: Calculate the total electricity bill.

STEP9: Display Results.

CLASS DIAGRAM:



PROGRAM:

```
//Experiment-01
//created by
//Karthikeyan.G
package billings;

import java.util.Scanner;

public class ElectricityBill {

    private long customernumber;

    private String customername;

    private long previousmonthreading;

    private long currentmonthreading;

    private String customertype;

    public ElectricityBill()

    {

        this.customernumber=1000;

        this.customername="gk";
```

```

        this.previousmonthreading=10;

        this.currentmonthreading=12;

        this.customertype="domestic";
    }

    public ElectricityBill(long number,String name,long pmr,long cmr ,String type)
    {

        this.customernumber=number;

        this.customername=name;

        previousmonthreading=pmr;

        currentmonthreading=cmr;

        customertype=type;
    }

    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.println("Enter the customer name:");

        this.customername= sc.next();

        System.out.println("Enter the Previous Month Reading");

        previousmonthreading=sc.nextLong();

        System.out.println("Enter the Current Month Reading");

        currentmonthreading=sc.nextLong();

        System.out.println("Enter the Customer type (Domestic,Commercial)");

        customertype=sc.next();
    }

```

```

    }

    public void printData()
    {
        System.out.print("Customer Number:"+customernumber+"
"+"CustomerName:"+customername+" ");

        System.out.print("PreviousMonthReading:"+previousmonthreading+"
"+"CurrentMonthReading:"+currentmonthreading+" "+"Customer Type:"+customertype);
    }

    public void computeBillamount()
    {
        long unit=currentmonthreading-previousmonthreading;

        double 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");
}

}

package billings;

```

```
public class Calculationofbilling
```

```
{
```

```
    public static void main(String[] args) {
```

```
        ElectricityBill B1,B2;
```

```
        B1=new ElectricityBill(1000,"gk",1010,1329,"Domestic");
```

```
        B1.printData();
```

```
        B2=new ElectricityBill();
```

```
        B2.getdata();
```

```
        B1.computeBillamount();
```

```
        B2.computeBillamount();
```

```
    }
```

```
}
```

OUTPUT:

Customer Number:1000 CustomerName:gk PreviousMonthReading:1010
CurrentMonthReading:1329 Customer Type:Domestic

BILLING INFORMATION

Enter the customer number:212217105023

Enter the customer name:

kaarthikeyan

Enter the Previous Month Reading

1234

Enter the Current Month Reading

2123

Enter the Customer type (Domestic,Commercial)

Domestic

SALE BILL

Customer Number:1000 CustomerName:gk PreviousMonthReading:1010
CurrentMonthReading:1329 Customer Type:Domestic Total Amount: 1276.00 Rs

SALE BILL

Customer Number:212217105023 CustomerName:kaarthikeyan
PreviousMonthReading:1234 CurrentMonthReading:2123 Customer Type:Domestic
Total Amount: 5334.00 Rs

RESULT:

Thus the java console to generate electricity bill was created and output is verified successfully.