EXP.NO:01	ELECTRICITY BILL GENERATOR
DATE:08.07.19	

AIM:-

To develop a java console application to generate ElectricityBill and to create a package biiling and to create a class ElectricityBill with the following members:customer no,customer name,previous month reading,current month reading,type

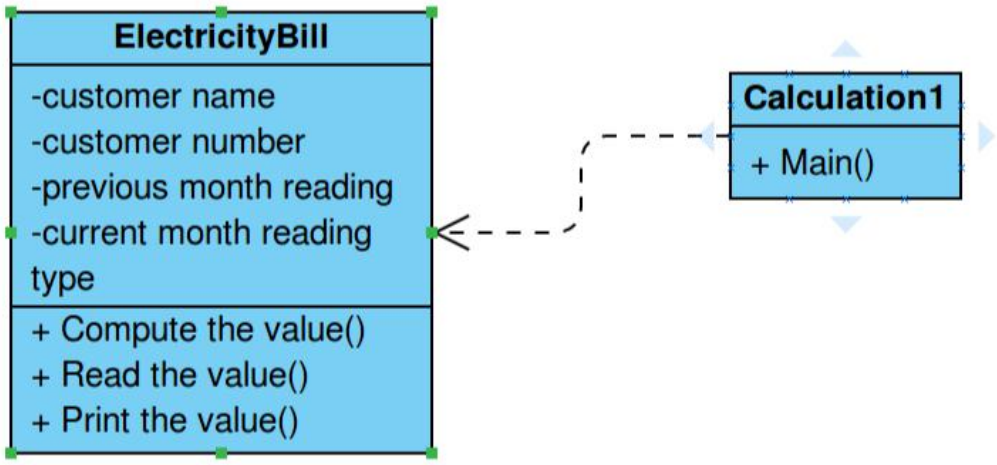
REQUIREMENTS:

Create a class ElectricityBills with the following Data members:custumer no,customer name,previous month reading,current month reading,type Member function: Read the value,compute the value,print the value

ALGORITHM:

STEP1:Declare a package Billings STEP2:Declare a class
name ElectricityBill STEP3:Declare a constructor with initial
attribute STEP4:Declare a data member and a member
function STEP5:Declare a class Calculation1 with static
main function
STEP6:Create object of type with customer name,customer no,previous month reading,current month
reading,customer type(Domestic or Commercial)
STEP7:Get the input from the user
STEP8:Calculate the total electricity billing
STEP9:Display result

CLASS DIAGRAM:



PROGRAME:

ElectricityBill.java

```
/***created by m.uday kanth, eee-B
 *  mail id:-udaykanth67@gmail.com
 */
package Billings; import
java.util.Scanner; public
class ElectricityBill
```

```
private long customernumber;
private String customername;
private double previousmonthreading;
private double currentmonthreading;
private String customertype;
/**
 * to create electricity bill with initial values
*
*/
public ElectricityBill(){
this.customernumber=1000;
this.customername="unknown";
this.currentmonthreading=0;
this.previousmonthreading=0;
this.customertype="Domestic";
        }
public ElectricityBill(long number,String name,double c_reading,double p_reading,String
                type){ this.customernumber=number;
                this.customername=name;
                currentmonthreading=c_reading;
                previousmonthreading=p_reading;
                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.print("Enter
        the customer name:"); customername= sc.next();
        System.out.print("Enter the current month reading:");
        currentmonthreading=sc.nextDouble();
        System.out.print("Enter the previous month reading");
        previousmonthreading=sc.nextDouble();
        System.out.print("Enter the customer type (Domestic or
        Commercial):"); customertype=sc.next();
        }
        /**
         * to print the bill details
         */
public void printData(){
System.out.printf("%-40s
%40s\n","CustomerNumber:"+customernumber,"CustomerName:"+customername);
System.out.printf("%s%8.2f%s%8.2f%-16s%40s\n","currentmonth
reading:",currentmonthreading,"previous month
reading:",previousmonthreading,"CustomerType:",customertype);
                }
/***
* to get the total amount
*/
public void computeBillAmount(){
                double totalAmount=-1;
```

```
		double unitsconsumed;
		String divider="--------------------------------------------------------------------------------";

		unitsconsumed=currentmonthreading-previousmonthreading;
		if(customertype.equals("Domestic")) {
			if((unitsconsumed>=0)&& (unitsconsumed<=100))
			{
				totalAmount=unitsconsumed*1.0;
			}else if((unitsconsumed>=101)&&(unitsconsumed<=200))
			{
				totalAmount=unitsconsumed*2.50;
			}else if((unitsconsumed>=201)&&(unitsconsumed==500))
			{
				totalAmount=unitsconsumed*4.0;
			}else
			{
				totalAmount=unitsconsumed*6.0;
			}
		}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*6.0;
			}else
			{
				totalAmount=unitsconsumed*7.0;
			}
		}
		System.out.print("\n"+divider+"\n");
		System.out.printf("%40s", "Electricity 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");
	}
}
```

Calculation1.java

```
/**created by m.uday kanth, eee-B
 * mail id:-udaykanth67@gamil.com
*
 */
package Billings;
public class Calculation1 {
	public static void main(String[] args) {
```

```
        ElectricityBill bill1,bill2;
        bill1=new ElectricityBill(2001,"Kamal",0,0,"Domestic");
        bill1.printData();
        bill2=new ElectricityBill();
        bill2.getData();
        bill1.computeBillAmount();
        bill2.computeBillAmount();
    }

}
```

OUTPUT:-

```
Customer Number:2001                    CustomerName:Kamal
current month reading:0.00      previous month reading:-0.00  customer type:-domestic
                                  BILLING INFORMATION
Enter the customer number:1234
Enter the customer name:uday
Enter the current month reading:253
Enter the previous month reading145
Enter the customer type (Domestic or Commercial):domestic
--------------------------------------------------------------------------------
            Electricity BILL
--------------------------------------------------------------------------------
Customer Number:2001                    CustomerName:Kamal
current month reading:      0.00 previous month reading:      0.00 CustomerType:
Domestic
        Total Amount:  0.00 Rs
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
            Electricity BILL
--------------------------------------------------------------------------------
Customer Number:1234                    CustomerName:uday
current month reading:    253.00 previous month reading:    145.00 CustomerType:
domestic
        Total Amount:  -1.00 Rs
```

RESULT:-

Hence,as per requirement electricity bill is generated with previous month reading and current month reading by using java.