

Aim:

Develop a Java cansole application to generate Electricity bill.

Requirements:

create a class Electricity bill with the following data members:consumer no,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:

Step:1-Declare a package billings

Step:2-Declare a class name Electricity bills

Step:3-Declare a constrution with initial aterative

Step:4- Declare a data members and a member function

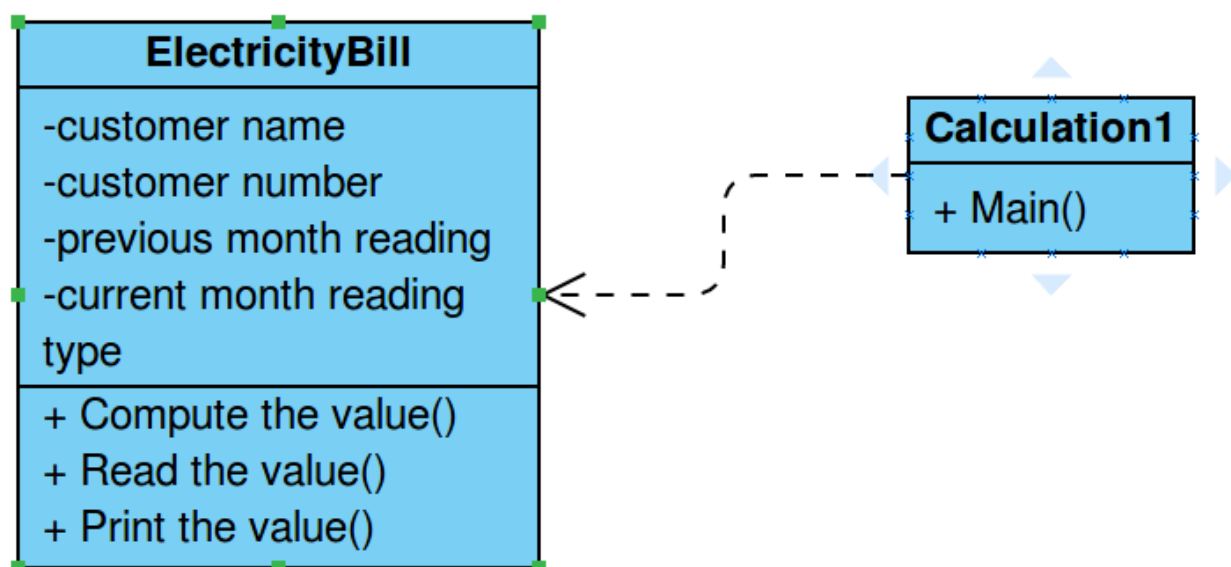
step:5-Declare a class calculation with static main function

Step:6-create object or a type with Declare customer name,customer no,previous month reading,customer type(domestic or commercial)

Step:7-Get the input from user

Step:8-Calculate the total electricity bill

Step:9-Display Result.



PROGRAMME:

ElectricityBill.java

```
package billings;
import java.util.Scanner;
import java.util.Scanner;
/**
 * Electricity bill
 * @author M.upendra
 *
 */
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;
        double c_rating;
        currentmonthreading=c_reading;
        previousmonthreading=p_reading;
        customertype=type;
    }
}
```

```

/**
 * to get bill information from the user
 */
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", "Customer
Number:"+customernumber,"CustomerName:"+customername);
    System.out.printf("%s%8.2f %s%8.2f %-16s %40s\n", "current month
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

```
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	customer name: kamal
current month reading:0	previous month reading:0
customer type:Domestic	

BILLING INFORMATION

Enter the customer number: 47655
Enter the customer name: upendra
Enter the current month reading: 899
Enter the previous month reading:675
Enter the customer type(Domestic or Commercial):Commercial

ELECTRICITY BILL

customer number=2001	customer name:kamal
current month reading:0	previous month reading:0
customer type: Domestic	

Total amount:0.00 Rs

ELECTRICITY BILL

customer number:47655
current month reading:899
customer type:Commercial

customer name:upendra
previous month reading:675

Total amount:1344 Rs

RESULT : Thus a java console application is developed to find Electricity Bill