

Exp No:	Java Application for Electricity Bill
Date:	

AIM:

To develop a Java console application to generate Electricity Bill by creating a package as Billings and create a Class as Electricity Bill.

REQUIREMENT:

Create a Class Electricity Bill 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:

Step 1: Declare a package Electricity Bills.

Step 2: Declare a Class name of Electricity Bills.

Step 3: Declare Constructors with initial attributes.

Step 4: Declare a get data member and member function.

Step 5: Declare class function, with a static main function.

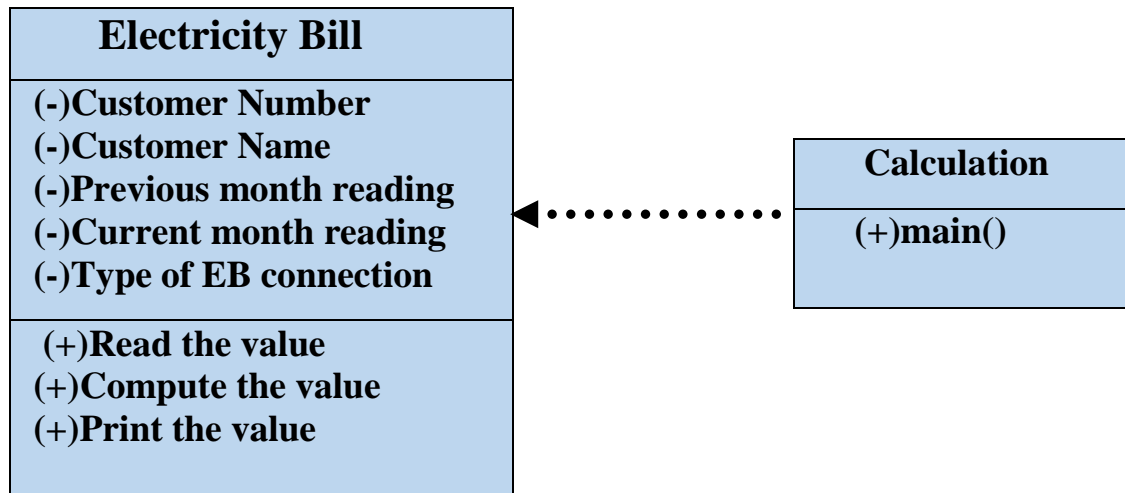
Step 6: Create object of type with Consumer number, Consumer name, Previous month

reading, Current month reading, Type of EB connection.

Step 7: Get input from user.

Step 8: Calculate the total Electricity Bill and display the Result.

CLASS DAIGRAM:



JAVA PROGRAM:

ElectricityBill.java

```
/****
```

```
* Program for Electricity Bills
```

```
* @author Pavan Kalyan
```

```
* npkr.nvrr@outlook.com
```

```
*/
```

```
package ElectricityBills;
```

```
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,Stringname,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:");
    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");
    }
}

```

Calculation1.java

```

/****
 * Program for Calculation
 * @authorPavanKalyan
 * npkr.nvrr@outlook.com
 */
packageelectricitybills;

publicclassCalculationforbillings {

    publicstaticvoidmain(String[] args) {
        // TODO Auto-generated method stub
        ElectricityBills E1,E2;
        E1=new ElectricityBills(1001,"pavan",,110,"Domestic");
        E1.printData();
        E2=newElectricityBills();
        E2.getdata();
        E1.computeBillamount();
        E2.computeBillamount();
    }

}

```

OUTPUT:

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

BILLING INFORMATION

Enter the customernumber:5041
Enter the customername: Kalyan
Enter the Previous Month Reading:224
Enter the Current Month Reading:120
Enter the Customer type (Domestic,Commercial):Domestic

SALE BILL

CustomerNumber:1001
CustomerName:pavan
PreviousMonthReading:90
CurrentMonthReading:110
Customertype:Domestic
Total Amount: 90.00 Rs

SALE BILL

CustomerNumber:5041
CustomerName:Kalyan
PreviousMonthReading:224
CurrentMonthReading:120
Customertype:Domestic
Total Amount: 560.00 Rs

RESULT: Thus Java console Application is developed to generate the Electricity Bill.