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| **EX 01** | **ELECTRICITY BILL GENERATION** |
| **09-07-2019** |

**AIM:**

To develop a java console application to generate electricity bill.

**REQUIREMENT:**

Develop a java application to create a package billings and to create a class

ElectricityBill with the data members: Consumer no, Consumer name, previous month

reading, current month reading, type of EB connection.

Member functions: getData, printData, computeBillAmount, and constructors,

Create a class Calculation1 with main function, create object EBill class, get the data

and display the bill amount by calling computeBillAmount function.

**ALGORITHMS:**

Step1: Create class ElectricityBill with customernumber, customername,

previousmonthreading, currentmonthreading, type data members , getdata,

printdata, and computeBillAmount member functions and constructors.

Step 2: Create class Calculation1 with a static main function.

Step 3: Get data from user.

Step 4: Compute BillAmount.

Step 5: Print data.

**CLASS DIAGRAM:**



**PROGRAM:**

…………………………Electricity bill………………………………….

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\*/

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");

}

}

…………………………………….Calculation………………………………….

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\*/

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:1003 CustomerName:Sanjith PreviousMonthReading:4916 CurrentMonthReading:5316 Customer Type:Domestic

BILLING INFORMATION

Enter the customer number:5002

Enter the customer name:

Abhijith

Enter the Previous Month Reading

10

Enter the Current Month Reading

12

Enter the Customer type (Domestic,Commercial)

Domestic

------------------------------------------------------------------------------------

SALE BILL

------------------------------------------------------------------------------------

Customer Number:1003 CustomerName:gk PreviousMonthReading:4916 CurrentMonthReading:5316 Customer Type:Domestic Total Amount: 1276.00 Rs

------------------------------------------------------------------------------------

------------------------------------------------------------------------------------

SALE BILL

------------------------------------------------------------------------------------

Customer Number:5002 CustomerName:Abhijith PreviousMonthReading:10 CurrentMonthReading:12 Customer Type:Domestic Total Amount: 5.00 Rs

------------------------------------------------------------------------------------

**RESULT:**

Thus a java application has been created to generate electricity bill.