EXP.1	
09-07-19	

ELECTRICITY BILL

AIM:

To develop a java console application to find the electricity bill based on the type of EB connection.

REQUIREMENT:

Develop a java application to create a package billings and to create a class ElectricityBill with the data members as customer number,customer name,previous month reading,current month reading,type.

member functions are get data,print data,compute bill amount and constructors.create a class Calculation with main function,create object of ElectricityBill class,get the data and display the bill amount by calling compute bill amount() function.

ALGORITHM:

1. Declare a package billings.

2. Declare a class name ElectricityBill.

3. Declare a constructor with initial attributes.

4. Declare a data member and member function.

5. Declare a class Calculation with static main function.

6. Create object or type with customer name,customer number,previous month reading,current month reading,customer type.

7. Get input from user.

8. Calculate the total electricity bill.

9. Display the result.

CLASS DIAGRAM:
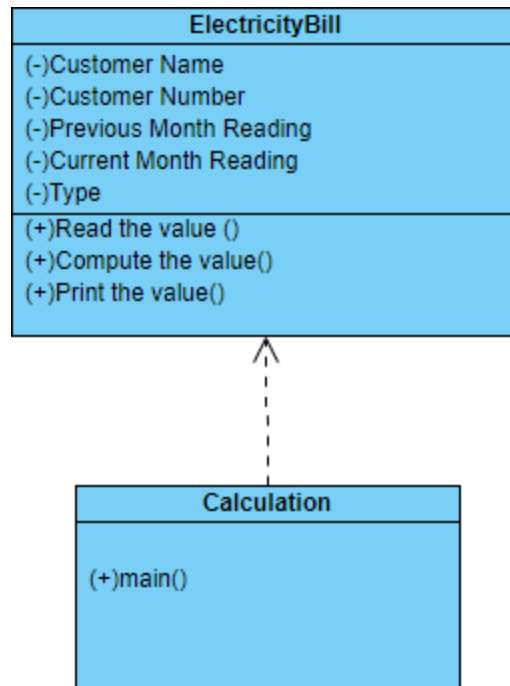
PROGRAM:

package billings;

import java.util.Scanner;

/****

Class to show the electricity bill

*@author Nikhil

nikhilkumar9492@gmail.com

*/

public class ElectricityBill { private long customernumber;
private String customername; private String customertype;
private double lastmonthreading;
private double currentmonthreading;

```java
/***

To create sale bill with initial values

@author nikhil

*/

public ElectricityBill()

{

this.customernumber=1000; this.customername="unknown";
this.customertype="domestic"; this.lastmonthreading=100;
this.currentmonthreading=0;
}

public ElectricityBill(long number,String name,String type,double previous,double current)

{

this.customernumber=number; this.customername=name;
customertype=type; lastmonthreading=previous;
currentmonthreading=current;
}


/***

To get electricity bill from the user

*/

public void getData()

{
Scanner sc=new Scanner(System.in);
```

```java
System.out.printf("\n%40s","ELECTRICITY  BILL");
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  type  of  EB  connection(DOMESTIC
OR  COMMERCIAL:"); customertype=sc.next();

System.out.print("Enter  the  last  month  coustomer  reading :");
lastmonthreading=sc.nextInt();

System.out.println("Enter  the  current  month  coustomer  reading:");
currentmonthreading=sc.nextInt();



}

/*****

To print the electricity bill details

* @author nikhil
*/

public  void  printData()

{

System.out.printf("%-40s%40s\n",  "Customer
Number:"+customernumber,"CustomerName:"+customername);

System.out.printf("%s40%s %-16s %f\n", "Type  of  EB
Connection:",customertype,"last  month
reading:",lastmonthreading);

System.out.printf("%-40s", "current  month
reading:"+currentmonthreading);

}

/***
```

```java
* To calculate the electricity bill amount
*/

public  void  computeBillAmount()

{

double totalAmount=-1;

double  quantity=currentmonthreading-lastmonthreading;

String
divider="--------------------------------------------------------------------
----
-----";

if(customertype.equals("DOMESTIC"))



{

if((quantity>=0)&& (quantity<=100))

{

totalAmount=quantity*1;

}else if((quantity>=101)&&(quantity<=200))

{

totalAmount=quantity*2.50;

}else if((quantity>=201)&&(quantity<=500))
```

```
{

totalAmount=quantity*4;

}else

{

totalAmount=quantity*6;

}

}else if(customertype.equals("COMMERCIAL"))

{

if((quantity>=0)&& (quantity<=100))
{

totalAmount=quantity*2;

}else if((quantity>=101)&&(quantity<=200))

{

totalAmount=quantity*4.50;

}else if((quantity>=201)&&(quantity<=500))

{

totalAmount=quantity*6;

}else

{

totalAmount=quantity*7;
```

```
        }

        }

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");
        }

        }
```

CALCULATION

```
/******


* To calculate the electricity bill amount

*
* Developed by

* nikhil

*


* nikhilkumar9492gmail.com

*


*/


package billings;


public class calculation {
```

```
public static void main(String[] args) { ElectricityBill bill1,bill2;


bill1=new ElectricityBill(2000,"kamal","domestic",100,200);
bill1.printData();

bill2=new ElectricityBill(); bill2.getData();
bill1.computeBillAmount(); bill2.computeBillAmount();
}


}
```

OUTPUT:

Customer Number:2000 CustomerName:kamal

Type of EB Connection:40domestic previous month reading: 100.000000

current month reading:200.0

BILLING INFORMATION

Enter the customer number:52341 Enter the customer name: nikhil

Enter the type of EB connection(DOMESTIC OR COMMERCIAL:COMMERCIAL Enter the previous month reading :250

Enter the current month reading: 576

ELECTRICITY BILL

Customer Number:2000 CustomerName:kamal

Type of EB Connection:40domestic previous month reading: 100.000000

current month reading:200.0   Total Amount: -1.00 Rs

ELECTRICITY BILL

Customer Number:212217105011   CustomerName: Nikhil Type of EB Connection:40COMMERCIAL previous month reading: 250.000000

current month reading:576.0 Total Amount: 1956.00 Rs

RESULT:

Thus a java console application is developed to find the electricity bill of an user based on the EB connection.