

Ex no:	ELECTRICITY BILL GENERATION
Date:	

AIM:

Develop a Java console 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

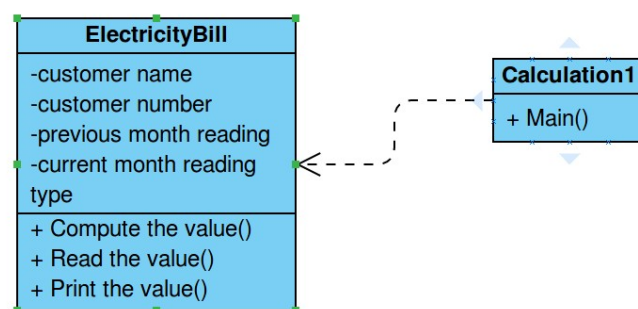
Step:6 -create object or a type with Declare customer name,customer no,previous month reading,customer type(domestic or commercial)

Step:7 -Get the input from user

Step:8 -Calculate the total electricity bill

Step:9 -Display Result.

CLASS DIAGRAM:



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
current month reading:0
customer type:Domestic
customer name: kamal
previous month reading:0
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
current month reading:0
customer type: Domestic
customer name:kamal
previous month reading:0
Total amount:0.00 Rs
ELECTRICITY BILLcustomer 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