Exp.no:
Date:

Java Appliction For Creating ElectricityBill

Aim:

To develop a Java console application to generate ElectricityBill.

Requirement:

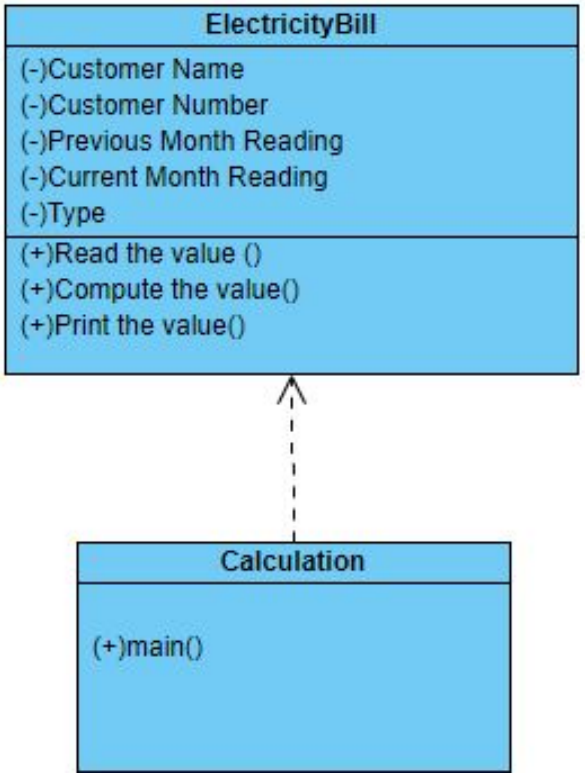
- Develop a java application to create a package billings and to create a class ElectricityBill with the data members,consumer number,consumer name,previous month reading,current month reading,type of EB connection.

- Create a class calculation with main function,create object of eb class,get the data and display the bill amount by calling compute Bill amount function.

Algorithm:

Step 1:Declare a package Billings .
Step2:Declare a class name Electricitybill
Step 3:Declare a construction with initial attributes.
Step 4:Declare a data member and member function.
Step 5:Declare a class calculation with consumer name
Step 6:Create object of type with consumer name,consumer number,previous month reading,current month reading,consumer type.
Step 7:Get input from user.
Step 8:calculate the total ElectricityBill.
Step 9:Display the result.

Class Diagram:



Program:

```
/***Experiment 01
*created by G.Nikhil
*
* eee-A
*/

package billings;

import
java.util.Scanner;
```

```
public class
ElectricityBill {
private long
customer_number;
private String
customer_name;
private String
customer_type;
private double
lastmonthreading;
private double
currentmonthreading;

public ElectricityBill()
{
this.customer_numbe
r=1000;
this.customer_name=
"noname";
this.customer_type="
domestic";
this.lastmonthreading
=100;
this.currentmonthread
ing=0;
}
public
ElectricityBill(long
number,String
name,String
type,double
previous,double
current)
{
this.customer_numbe
r=number;
this.customer_name=
name;
this.customer_type=ty
pe;
lastmonthreading=pre
vious;
currentmonthreading=
current;
}
```

```
public void getData()
{
Scanner sc=new
Scanner(System.in);
System.out.printf("\n
%40s","ELECTRICIT
Y BILL");
System.out.print("\nE
nter the customer
number:");
this.customer_numbe
r=sc.nextLong();
System.out.print("Ent
er the customer
name:");
customer_name=
sc.next();
System.out.print("Ent
er the type of EB
connection(DOMESTI
C OR
COMMERCIAL:");
customer_type=sc.ne
xt();
System.out.print("Ent
er the last month
coustomer reading :");
lastmonthreading=sc.
nextInt();
System.out.println("E
nter the current month
coustomer reading:");
currentmonthreading=
sc.nextInt();
}
public void printData()
{
System.out.printf("%-
40s%40s\n",
"Customer
Number:"+customer_
number,"CustomerNa
me:"+customer_name
);
```

```
System.out.printf("%s
40%s %-16s %f\n",
"Type of EB
Connection:",custome
r_type,"last month
reading:",lastmonthre
ading);
System.out.printf("%-
40s", "current month
reading:"+currentmon
threading);
}
/***
* To calculate the
electricity bill amount
*/
public void
computeBillAmount()
{
double
totalAmount=-1;
double
quantity=currentmont
hreading-lastmonthre
ading;
String
divider="----------
----------
----------
------";
if(customer_type.equ
als("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(customer_type.equ
als("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("%4
0s", "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:

```
/***created by g.nikhil
* eee-A
*
*/

package billings;

public class Calculation {

public static void main(String[] args) {
// TODO Auto-generated method stub
ElectricityBill bill1,bill2;

bill1=new ElectricityBill(2000,"Kumar","domestic",100,200);
bill1.printData();
bill2=new ElectricityBill();
bill2.getData();
bill1.computeBillAmount();
bill2.computeBillAmount();
}


}
```

OUTPUT:

```
Enter the customer number:5017
Enter the customer name:nikhil
Enter the type of EB connection(DOMESTIC OR COMMERCIAL:DOMESTIC
Enter the last month coustomer reading :500
Enter the current month coustomer reading:
200

--------------------------------------------------------------------------------
                    ELECTRICITY BILL
--------------------------------------------------------------------------------
Customer Number:2000                                CustomerName:Kumar
Type of EB Connection:40domestic last month reading: 100.000000
current month reading:200.0                         Total Amount:   -1.00 Rs
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
                    ELECTRICITY BILL
--------------------------------------------------------------------------------
Customer Number:5017                                CustomerName:nikhil
Type of EB Connection:40DOMESTIC last month reading: 500.000000
current month reading:200.0                         Total Amount:-1800.00 Rs
--------------------------------------------------------------------------------
```

Result:

Thus the java application for electricity bill is programmed and executed successfully.