**BISHOP GEORGE SCHOOL & COLLEGE**

computer project

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Class : 12TH

Submitted To:   
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**ACKNOWLEDGEMENT**

Making this project was started from 1st Nov. Making this project was a great pleasure for me . First of all I would like to give thanks to my computer

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Nishant

12TH

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**INTRODUCTION**

Java is a general-purpose computer programming language that is concurrent, class-based, object-oriented,[14] and specifically designed to have as few implementation dependencies as possible. It is intended to let application developers "write once, run anywhere" (WORA),[15] meaning that compiled Java code can run on all platforms that support Java without the need for recompilation.[16] Java applications are typically compiled to bytecode that can run on any Java virtual machine (JVM) regardless of computer architecture. As of 2016, Java is one of the most popular programming languages in use,[17][18][19][20] particularly for client-server web applications, with a reported 9 million developers.[21] Java was originally developed by James Gosling at Sun Microsystems (which has since been acquired by Oracle Corporation) and released in 1995 as a core component of Sun Microsystems' Java platform. The language derives much of its syntax from C and C++, but it has fewer low-level facilities than either of them.

In this project we input the BSNL plan details according to their criteria like Calls, SMS, Internet, and other rental charges then calculate the total bill on the basis of plan chosen by the customer and display the bill on the format given by the question

Question:

BSNL charges for using Mobile SIM from their customer according to the plan in following criteria:

Plan 299/-

Calls: Up to 100 minutes : Rs. 0

More than 100 minutes : Rs. 0.50 per call

SMS: Up to 200 : Rs. 0

More than 200 : Rs. 1 per SMS

Internet: 10 MB : Rs. 5

Plan 349/-

Calls: Up to 200 minutes :Rs.0

More than 200 minutes :Rs.0.50 per call

SMS: Up to 200 : Rs.0

More than 200 : Rs.1 per SMS

Internet: 20 MB : Rs.0

More than 20 MB : Rs.5 per 10 MB

Plan 399/-

Calls: Up to 200 minutes : Rs.0

More than 200 minutes : Rs.0.50 per call

SMS: Up to 500 : Rs.0

More than 500 : Rs.1 per SMS

Internet: 1 GB : Rs.0

More than 1 GB : Rs.10 per 10 MB

Moreover Rs.399/- should be rental charge

Plan 499/-

Calls: Up to 700 minutes : Rs.0

More than 700 minutes : Rs.0.50 per call

SMS: Up to 500 : Rs.0

More than 500 : Rs.1 per SMS

Internet: 2 GB : Rs.0

More than 2 GB : Rs.10 per 10 MB

Moreover Rs.499/- should be rental charge

Plan 549/-

Calls: Up to 500 minutes : Rs.0

More than 500 minutes : Rs.0.50 per call

SMS: Up to 400 : Rs.0

More than 400 : Rs.1 per SMS

Internet: Unlimited

Moreover Rs.549/- should be rental charge

Design a class Bill description of which as follows:

Data Members:

String name - To store name of customer

long Mobile - To store mobile number of customer

int SMS - To store number of SMS sent

int calls - To store number of outgoing calls

int plan - To store type of plan

double charge - To store total bill amount

Member Functions:

Bill() - Default constructor to initialize data members with

legal values.

void activatePlan() - To show list of plans and activate a plan.

void addCostumer() - To add a customer(Name and Moble Number)

void input() - To input and store name of customer, mobile number,

number of SMS and number of calls made by

customer.

void YourPlanDetail() - To see the plan detail of customer.

void changePlan() - To change the plan.

void calculate() - To calculate the bill according to the above given

plan.

void TAX() - To include 14% service tax, 1% education cess, 0.5%

Swatch Bharat cess, 0.5% Krishi Kalyan cessin your

bill.

void displayCust() - To display the customer details with plan name.

void displayBill() - To display the bill in the following format:

BSNL BILL

NAME : XXXXXXXXX

MOBILE NUMBER : XXXXXXX

MONTHLY RENTAL PLAN : XXXXXXXX

SMS : XXX

SMS CHARGES : XXX Rs.

CALLS : XXX

CALL CHARGES : XXX Rs.

SUB TOTAL : XXX Rs.

TAXES : XXX Rs.

TOTAL BILL : XXX Rs.

You can use more data members and methods as per requirements of the program. With the help of above methods create an object and call the above member methods to properly execute the program.

Program

import java.util.\*;

public class Bill

{

String name; **// to input the variable**

long Mobile;

int SMS;

int calls;

int plan;

double internet;

double tax;

double charge;

double subcharge;

double callcharge;

double SMScharge;

double internetcharge;

static Scanner sc=new Scanner(System.in);

Bill()

{

name="Unknown";

Mobile=0;

SMS=0;

calls=0;

plan=299;

internet=0;

charge=0;

}

void activatePlan() **// to show the list of plans and activate a plan**

{

System.out.println("\t"+"-----BSNL MOBILE PLANE ARE GIVEN BELOW-----");

System.out.println();

System.out.println(" (1). PLAN 299");

System.out.println("Calls:"+"\t"+"Up to 100 minutes"+"\t"+"Rs. 0");

System.out.println("\t"+"More than 100 minute"+"\t"+"Rs. 0.50 per call");

System.out.println("SMS:"+"\t"+"Up to 200 SMS"+"\t"+"\t"+"Rs. 0");

System.out.println("\t"+"More than 200 SMS"+"\t"+"Rs. 1 per SMS");

System.out.println("Internet:"+"\t"+"10 MB"+"\t"+"\t"+"Rs. 5");

System.out.println("Moreover Rs.299/- should be paid as rental charge.");

System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

System.out.println(" (2). PLAN 349");

System.out.println("Calls:"+"\t"+"Up to 200 minutes"+"\t"+"Rs. 0");

System.out.println("\t"+"More than 200 minute"+"\t"+"Rs. 0.50 per call");

System.out.println("SMS:"+"\t"+"Up to 200 SMS"+"\t"+"\t"+"Rs. 0");

System.out.println("\t"+"More than 200 SMS"+"\t"+"Rs. 1 per SMS");

System.out.println("Internet:"+"\t"+"20 MB"+"\t"+"\t"+"Rs. 0");

System.out.println("\t"+"More than 20 MB"+"\t"+"\t"+"Rs. 5 per 10 MB");

System.out.println("Moreover Rs.349/- should be paid as rental charge.");

System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

System.out.println(" (3). PLAN 399");

System.out.println("Calls:"+"\t"+"Up to 200 minutes"+"\t"+"Rs. 0");

System.out.println("\t"+"More than 200 minute"+"\t"+"Rs. 0.50 per call");

System.out.println("SMS:"+"\t"+"Up to 500 SMS"+"\t"+"\t"+"Rs. 0");

System.out.println("\t"+"More than 500 SMS"+"\t"+"Rs. 1 per SMS");

System.out.println("Internet:"+"\t"+"1 GB"+"\t"+"\t"+"Rs. 0");

System.out.println("\t"+"More than 1 GB"+"\t"+"\t"+"Rs. 10 per 10 MB");

System.out.println("Moreover Rs.399/- should be paid as rental charge.");

System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

System.out.println(" (4). PLAN 499");

System.out.println("Calls:"+"\t"+"Up to 700 minutes"+"\t"+"Rs. 0");

System.out.println("\t"+"More than 700 minute"+"\t"+"Rs. 0.50 per call");

System.out.println("SMS:"+"\t"+"Up to 500 SMS"+"\t"+"\t"+"Rs. 0");

System.out.println("\t"+"More than 500 SMS"+"\t"+"Rs. 1 per SMS");

System.out.println("Internet:"+"\t"+"2 GB"+"\t"+"\t"+"Rs. 0");

System.out.println("\t"+"More than 2 GB"+"\t"+"\t"+"Rs. 10 per 10 MB");

System.out.println("Moreover Rs.499/- should be paid as rental charge.");

System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

System.out.println(" (5). PLAN 549");

System.out.println("Calls:"+"\t"+"Up to 500 minutes"+"\t"+"Rs. 0");

System.out.println("\t"+"More than 500 minute"+"\t"+"Rs. 0.50 per call");

System.out.println("SMS:"+"\t"+"Up to 400 SMS"+"\t"+"\t"+"Rs. 0");

System.out.println("\t"+"More than 400 SMS"+"\t"+"Rs. 1 per SMS");

System.out.println("Internet:"+"\t"+"Unlimited");

System.out.println("Moreover Rs.549/- should be paid as rental charge.");

System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

System.out.println();

System.out.println("$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$");

System.out.println("PLEASE CHOOSE YOURE PLAN");

System.out.println("1> PLAN 299/-");

System.out.println("2> PLAN 349/-");

System.out.println("3> PLAN 399/-");

System.out.println("4> PLAN 499/-");

System.out.println("5> PLAN 549/-");

plan=sc.nextInt();

}

void addCustomer() **// to add a customer Name and Mobile Number**

{

System.out.println("<<PLEASE ENTER YOUR NAME>>");

name=sc.next();

System.out.println("<<PLEASE ENTER YOUR MOBILE NUMBER>>");

Mobile=sc.nextLong();

}

void input() **// to input and store name of customer, mobile No. , No. of SMS, and No. of calls**

{

System.out.println("PLEASE ENTER THE NUMBER OF SMS ==>");

SMS=sc.nextInt();

System.out.println("PLEASE ENTER THE NUMBER OF CALLS ==>");

calls=sc.nextInt();

System.out.println("PLEASE ENTER INTERNET USAGE IN MB ==>");

internet=sc.nextDouble();

String na=name;

long l= Mobile;

}

void YourPlanDetails() **// to see the plan detail of customer**

{

System.out.println("-----YOUR BSNL PLAN DETAILS ARE GIVEN BELOW-----");

if(plan==299)

{

System.out.println("\_\_\_\_\_\_PLAN 299\_\_\_\_\_\_");

System.out.println("Calls:"+"\t"+"Up to 100 minutes"+"\t"+"Rs. 0");

System.out.println("\t"+"More than 100 minute"+"\t"+"Rs. 0.50 per call");

System.out.println("SMS:"+"\t"+"Up to 200 SMS"+"\t"+"\t"+"Rs. 0");

System.out.println("\t"+"More than 200 SMS"+"\t"+"Rs. 1 per SMS");

System.out.println("Internet:"+"\t"+"10 MB"+"\t"+"\t"+"Rs. 5");

System.out.println("Moreover Rs.299/- should be paid as rental charge.");

System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

}

else if(plan==349)

{

System.out.println("\_\_\_\_\_\_PLAN 349\_\_\_\_\_\_");

System.out.println("Calls:"+"\t"+"Up to 200 minutes"+"\t"+"Rs. 0");

System.out.println("\t"+"More than 200 minute"+"\t"+"Rs. 0.50 per call");

System.out.println("SMS:"+"\t"+"Up to 200 SMS"+"\t"+"\t"+"Rs. 0");

System.out.println("\t"+"More than 200 SMS"+"\t"+"Rs. 1 per SMS");

System.out.println("Internet:"+"\t"+"20 MB"+"\t"+"\t"+"Rs. 0");

System.out.println("\t"+"More than 20 MB"+"\t"+"\t"+"Rs. 5 per 10 MB");

System.out.println("Moreover Rs.349/- should be paid as rental charge.");

System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

}

else if(plan==399)

{

System.out.println("\_\_\_\_\_\_PLAN 399\_\_\_\_\_\_");

System.out.println("Calls:"+"\t"+"Up to 200 minutes"+"\t"+"Rs. 0");

System.out.println("\t"+"More than 200 minute"+"\t"+"Rs. 0.50 per call");

System.out.println("SMS:"+"\t"+"Up to 500 SMS"+"\t"+"\t"+"Rs. 0");

System.out.println("\t"+"More than 500 SMS"+"\t"+"Rs. 1 per SMS");

System.out.println("Internet:"+"\t"+"1 GB"+"\t"+"\t"+"Rs. 0");

System.out.println("\t"+"More than 1 GB"+"\t"+"\t"+"Rs. 10 per 10 MB");

System.out.println("Moreover Rs.399/- should be paid as rental charge.");

System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

}

else if(plan==499)

{

System.out.println("\_\_\_\_\_\_PLAN 499\_\_\_\_\_\_");

System.out.println("Calls:"+"\t"+"Up to 700 minutes"+"\t"+"Rs. 0");

System.out.println("\t"+"More than 700 minute"+"\t"+"Rs. 0.50 per call");

System.out.println("SMS:"+"\t"+"Up to 500 SMS"+"\t"+"\t"+"Rs. 0");

System.out.println("\t"+"More than 500 SMS"+"\t"+"Rs. 1 per SMS");

System.out.println("Internet:"+"\t"+"2 GB"+"\t"+"\t"+"Rs. 0");

System.out.println("\t"+"More than 2 GB"+"\t"+"\t"+"Rs. 10 per 10 MB");

System.out.println("Moreover Rs.499/- should be paid as rental charge.");

System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

}

else if(plan==549)

{

System.out.println("\_\_\_\_\_\_PLAN 549\_\_\_\_\_\_");

System.out.println("Calls:"+"\t"+"Up to 500 minutes"+"\t"+"Rs. 0");

System.out.println("\t"+"More than 500 minute"+"\t"+"Rs. 0.50 per call");

System.out.println("SMS:"+"\t"+"Up to 400 SMS"+"\t"+"\t"+"Rs. 0");

System.out.println("\t"+"More than 400 SMS"+"\t"+"Rs. 1 per SMS");

System.out.println("Internet:"+"\t"+"Unlimited");

System.out.println("Moreover Rs.549/- should be paid as rental charge.");

System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

System.out.println();

}

}

void changePlan() **// to change the plan**

{ byte condition;

System.out.println("TO CHANGE YOUR PLAN PRESS 1 TO CHANGE OTHERWISE PREES 2");

condition=sc.nextByte();

if(condition==1)

{

activatePlan();

changePlan();

}

}

void calculate() // to calculate bill

{

callcharge=0;

SMScharge=0;

internetcharge=0;

if(plan==299)

{

if(calls>100)

{

callcharge=(calls-100)\*0.5;

}

if(SMS>200)

{

SMScharge=(SMS-200);

}

if(internetcharge>=1000)

{}

}

else if(plan==349)

{

if(calls>200)

{

callcharge=(calls-200)\*0.5;

}

if(SMS>200)

{

SMScharge=(SMS-200);

}

if(internetcharge>=10)

{

internetcharge=internet/10\*5;

}

}

else if(plan==399)

{

if(calls>200)

{

callcharge=(calls-200)\*0.5;

}

if(SMS>500)

{

SMScharge=(SMS-500);

}

if(internetcharge>20)

{

internetcharge=internet/10\*5;

}

}

else if(plan==499)

{

if(calls>700)

{

callcharge=(calls-700)\*0.5;

}

if(SMS>500)

{

SMScharge=(SMS-500);

}

if(internetcharge>=1024)

{

internetcharge=internet/10\*10;

}

}

else if(plan==549)

{

if(calls>500)

{

callcharge=(calls-500)\*0.5;

}

if(SMS>400)

{

SMScharge=(SMS-400);

}

}

subcharge=SMScharge+callcharge+internetcharge+plan;

}

void TAX() **// to include TAX**

{

//double tax;

tax=0;

double sertax,edutax,swtax,kktax;

sertax=subcharge\*14/100;

edutax=subcharge\*1/100;

swtax=subcharge\*0.5/100;

kktax=subcharge\*0.5/100;

tax=sertax+edutax+swtax+kktax;

charge=subcharge+tax;

}

void displayCust() **// to display the customer details**

{

System.out.println("YOUR DETAILS ARE GIVEN BELOW");

System.out.println("YOU HAVE CHOOSE PLAN :"+plan+"/-");

System.out.println("CUSTOMER NAME :"+"\t"+name);

System.out.println("CUSTOMER MOBILE NUMBER :"+"\t"+Mobile);

System.out.println("NUMBER OF SMS :"+"\t"+SMS);

System.out.println("NUMBER OF CALLS :"+"\t"+calls);

System.out.println("INTERNRT USAGE :"+"\t"+internet);

System.out.println("CHARGE OF INTERNET USAGE IS :"+"\t"+internetcharge);//???????????????????????????????????????????

System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

}

void displayBill() **// to display the bill**

{

System.out.println("\t"+"\t"+"BSNL BILL"+"\t");

System.out.println("-----------------------------------------------------------------------");

System.out.println(" NAME :"+"\t"+name);

System.out.println(" MOBILE NUMBER :"+"\t"+Mobile);

System.out.println(" MONTHLY RENTAL PLAN :"+"\t"+plan);

System.out.println(" SMS :"+"\t"+SMS);

System.out.println(" SMS CHARGE :"+"\t"+"Rs"+SMScharge);

System.out.println(" CALLS :"+"\t"+calls);

System.out.println(" CALL CHARGE :"+"\t"+"Rs"+callcharge);

System.out.println(" SUB TOTAL:"+"\t"+"Rs"+subcharge);

System.out.println(" TAXES :"+"\t"+"Rs"+tax);

System.out.println(" TOTAL BILL :"+"\t"+"Rs"+charge);

System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

}

public static void main(String args[])

{

Bill obj=new Bill();

obj.activatePlan();

obj.addCustomer();

obj.input();

obj.YourPlanDetails();

obj.changePlan();

obj.calculate();

obj.TAX();

obj.displayCust();

obj.displayBill();

} **// end of main method**

} **// end of class**

|  |  |  |
| --- | --- | --- |
| **Variable** | **Type** | **Description** |
| name | String | To store name of customer |
| Mobile | long | To store mobile number of customer |
| SMS | int | To store number of SMS sent |
| calls | int | To store number of outgoing calls |
| plan | int | To store type of plan |
| charge | double | To store total bill amount |
| internet | double | To store used internet in MB |
| tax | double | To store tax |
| subcharge | double | To store subcharge |
| SMScharge | double | To store SMScharge |
| internetcharge | double | To store internetcharge |
| callcharge | double | To store callcharge |

**Variable Description**

Output









**TEACHER’S COMMENT**