

1. A company wants to design an application for their employees which calculates bonus based given criteria

Note: Use NetBeans to develop this application

### Class: Employee

<b>Emp id</b> <b>Name</b> <b>Experience</b> <b>Basic</b> <b>Allowances</b> <b>Deductions</b> <b>GrossSalary</b> <b>NetSalary</b> <b>Bonus</b>
<b>setEmpID(),getEmpID()</b> <b>setName(),getName()</b> <b>setExp(),getExp()</b> <b>setEbasic(),getEbasic()</b> <b>setEall(),getEall()</b> <b>setEded(),getEded()</b> <b>calcGrossNET()</b> <b>getGross(),getNet()</b> <b>calcBonus(),getBonus()</b>

### Note:

- I. Execution class logic should be EmpDemo.java
- II. Employee class must be public & All the datamembers should be secured( should not be accessed outside the class).
- III. Gross salary, net salary and bonus fields are read only(ie no setXXX())
- IV. Gross salary=basic+allowances
- V. Net salary=gross salary-deductions
- VI. Bonus is calculated based on employee experience.
  - a. Experience >5 years 3 months of net salary as bonus
  - b. Experience >3 years 2 months of net salary as bonus
  - c. Other wise 1 month of net salary as bonus
- VII. Display 3 employees data as below

Output:

Empno	Name	Experience	Basic	Allowances	Deducations	Gross Sal	Net Sal	Bonus
101	Raj	6	12000	2000	1500	****	***	***
102	Prem	4	10500	2500	2000	****	***	***
103	Kushi	2	8500	1200	500	****	***	***

2. Write a program to add below set of no's (use method overloading)
  - a. 12,34,67
  - b. 12.45,45.78,78.90
  - c. 56,89
  - d. 1,2,3,4,5,6
  
3. Observe the following code and prepare the Application logic.

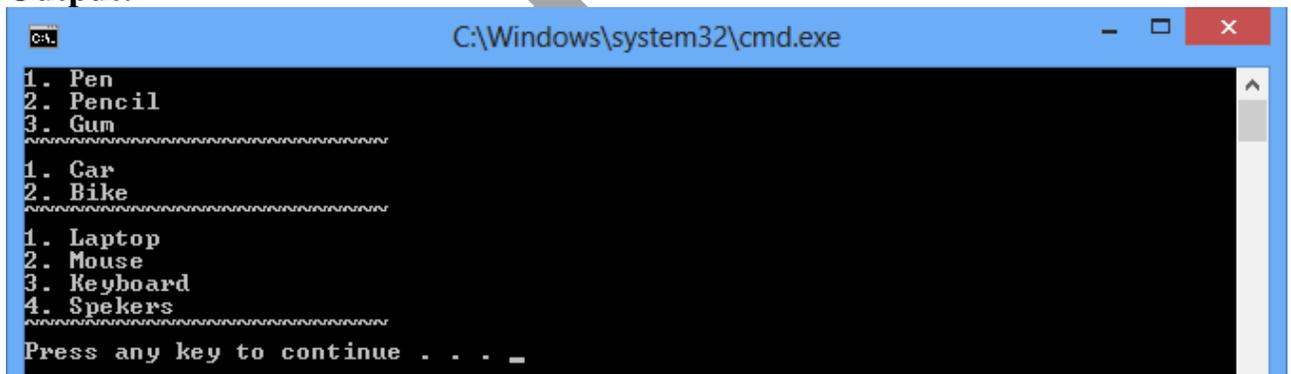
```

class ProductsDemo
{
    public static void main(String[] args)
    {
        Products p=new Products();
        p.disp("Pen","Pencil","Gum");
        p.disp("Car","Bike");
        p.disp("Laptop","Mouse","Keyboard","Spekers");
    }
}

```

**Note:** write 2 logics for disp(), 1 with method overloading and 1 with varargs.

**Output:**



```

C:\Windows\system32\cmd.exe
1. Pen
2. Pencil
3. Gum
*****
1. Car
2. Bike
*****
1. Laptop
2. Mouse
3. Keyboard
4. Spekers
*****
Press any key to continue . . . _

```

4. Write a program to read rollno, name and different hobbies of 5 students. (use varargs).

Pass student rno,name and hobbies to Student class constructor. Then display the details using display() method.

**Output:-**

101 Ravi Reading,Music,Driving.  
 102 Giri Cricket, Dancing, Chess, Singing, Gardening

**Student: class**

```

rno : int
name: String
hobbies[] : String
Student (int,String,String...)
display()

```

**5. WAP to read 5 customer details and print a report as below**

```

C:\Windows\system32\cmd.exe
Enter customer name and balance:Raj 5000
Enter customer name and balance:Prem 8900
Enter customer name and balance:hari 9000
Enter customer name and balance:sunil 7800
Enter customer name and balance:Jack 9000
Customer id name Balance
-----
1001 Raj 5000.0
1002 Prem 8900.0
1003 hari 9000.0
1004 sunil 7800.0
1005 Jack 9000.0
Press any key to continue . . .
  
```

**Note:**

- I. Customer id should be generated automatically
- II. Create only one customer object to read 5 customers details at runtime(array of objects)
- III. Customer class constructor should be as below  
Customer(java.lang.String name, double balance);
- IV. Customer class should contain display() method to print the customer info.

```

Customer: class

id : int
name: String
balance: double
count: static int

customer(string,double)
display()
  
```

**6. Write an Electricity Bill generation application from the given .class file (download .class file from the link given below assignment link)**

```

class EleBill
    id : int,
    customerName : String,
    previousReading : int,
    currentReading : int,
    serviceCategory : char

EleBill(int, java.lang.String, int, int, char);
int units();
double calcBill();
void display();
  
```

---

**Note: display() method internally invokes units() and calcBill() methods. So you are required to call only display() method to generate the output.**

**Read from keyboard following values – id, customerName, previousReading, currentReading, serviceCategory**

**Output:**

**Service No:1234**

**Category: Domestic**

**Customer Name:Anand**

**Units:100**

**Amount:275.0**

~~~~~

**Service No:1238**

**Category: Commercial**

**Customer Name:Raj**

**Units:180**

**Amount:1035.0**

---

ATISH JAIN