

OBJECT ORIENTED PROGRAMMING LAB

Experiment No.: 16

Aim

Prepare bill with the given format using calculate method from interface.

Order No. Date :

Product Id Name Quantity unit price Total

101 A 2 25 50

102 B 1 100 100

Net. Amount 150

Name: vismaya mohan

Roll No:54

Batch: B

Date:24/05/2022

Procedure

```
import java.util.Scanner;
```

```
interface calc
```

```
{  
    void calculate();  
}
```

```
class bill implements calc
```

```
{  
    String date,name,p_id;  
    int quantity;  
    double unit_price,total,namount=0;  
    Scanner sc = new Scanner(System.in);  
    public void getdata()  
    {
```

```
System.out.println("\nEnter product id:");
p_id = sc.nextLine();
System.out.println("Enter product name:");
name = sc.nextLine();
System.out.println("Enter the Quantity:");
quantity = sc.nextInt();
System.out.println("Enter the unit price:");
unit_price = sc.nextDouble();
}
```

```
public void calculate()
{
    total = quantity * unit_price;
}
```

```
public void display()
{
```

```
System.out.println(p_id+"\t\t"+name+"\t\t"+quantity+"\t\t"+unit_price+"\t"+total);
    }
}
```

```
public class Biller
{
    public static void main(String[] args)
    {
        int n,i;
```

```
double namount=0,t;

int ran;

String date;

t = Math.random() *1000000;

ran = (int) t;

Scanner sc = new Scanner(System.in);

System.out.println("Order no. #"+ran);

System.out.println("Enter the date:");

date = sc.nextLine();

System.out.println("Enter how many products are there:");

n = sc.nextInt();

bill ob[] = new bill[n];

for(i=0;i<n;i++)

    ob[i] = new bill();

for(i=0;i<n;i++){

    ob[i].getdata();

    ob[i].calculate();

}

System.out.println("Date:"+date);

System.out.println("Product Id \tName\t Quantity\t unit price\t Total ");

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

for(i=0;i<n;i++){

    ob[i].display();

    namount += ob[i].total;

}

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

System.out.println("\t\t\tNet.Amount\t"+ namount);
```

```
}  
  
}
```

Output

```
C:\Users\Student\Documents>javac Biller.java  
  
C:\Users\Student\Documents>java Biller  
Order no. #403570  
Enter the date:  
10/5/2022  
Enter how many products are there:  
2  
  
Enter product id:  
100  
Enter product name:  
laptop  
Enter the Quantity:  
2  
Enter the unit price:  
50000  
  
Enter product id:  
101  
Enter product name:  
Phone  
Enter the Quantity:  
3  
Enter the unit price:  
20000  
Date:10/5/2022  
Product Id      Name      Quantity      unit price      Total  
-----  
100             laptop        2             50000.0 100000.0  
101             Phone         3             20000.0 60000.0  
-----  
                        Net.Amount      &quot;+  
  
C:\Users\Student\Documents>
```

