/*1.Write a java application to accept an integer number, check and display the message whether the given number is positive/negative or neutral number. */

```
import java.util.Scanner;
class CheckNo{
public static void main(String args[]){
Scanner s=new Scanner(System.in);
System.out.println();
System.out.print("Enter an integer number ::");
int num=s.nextInt();
//System.out.println(num);
if(num>0)
System.out.println("Given no "+num+" is positive number.");
else if(num<0)
System.out.println("Given no "+num+" is negative number.");
else
System.out.println("Given no "+num+" is neutral number.");
System.out.println("========================");
}//Close of main
}//Close of class
```


//OUTPUT

```
Enter an integer number ::-5
Given no -5 is negative number.
========================
```

Enter an integer number ::14

Given no 14 is positive number.

==========

Enter an integer number ::0

Given no 0 is neutral number.

==========

/*2.Write a java application to accept three numbers, check and display the highest of the given three numbers. */

```
import java.util.Scanner;
class HighestOf3No{
public static void main(String args[]){
Scanner s=new Scanner(System.in);
System.out.println();
System.out.print("Enter three numbers ::");
int a=s.nextInt();
//System.out.println(a);
int b=s.nextInt();
//System.out.println(b);
int c=s.nextInt();
//System.out.println(c);
if(a>b)
 if(a>c)
  System.out.println("Highest number="+a);
```

```
  else
  System.out.println("Highest number="+c);
else
 if(b>c)
   System.out.println("Highest number="+b);
   else
   System.out.println("Highest number="+c);
```
}//Close of main

}//Close of class

//OUTPUT

```
Enter three numbers ::45
99
66
Highest number=99

Enter three numbers ::101
25
100
Highest number=101
```

/*3.Write a java application to accept three numbers, check and display the lowest of the given three numbers. */

```
import java.util.Scanner;
class LowestOf3No{
```

```
public static void main(String args[]){
Scanner s=new Scanner(System.in);
System.out.println();
System.out.print("Enter three numbers ::");
int a=s.nextInt();
System.out.println(a);
int b=s.nextInt();
System.out.println(b);
int c=s.nextInt();
System.out.println(c);
if(a<b)
 if(a<c)
  System.out.println("Lowest number="+a);
  else
  System.out.println("Lowest number="+c);
else
 if(b<c)
   System.out.println("Lowest numbe=:"+b);
   else
   System.out.println("Lowest number="+c);
}//Close of main
}//Close of class
```

//OUTPUT

```
Enter three numbers ::45
```

65

21

Lowest number=21

Enter three numbers ::11

22

44

Lowest number=11

/*4.Write a java application to accept four numbers, check and display the highest of the given four numbers. */

```
import java.util.Scanner;
class HighestOf4No{
public static void main(String args[]){
Scanner s=new Scanner(System.in);
System.out.println();
System.out.print("Enter four numbers ::");
int a=s.nextInt();
//System.out.println(a);
int b=s.nextInt();
//System.out.println(b);
int c=s.nextInt();
//System.out.println(c);
int d=s.nextInt();
//System.out.println(d);
```

```
if(a>b)
  if(a>c)
    if(a>d)
     System.out.println("Highest number="+a);
    else
     System.out.println("Highest number="+d);
  else if(c>d)
   System.out.println("Highest number="+c);
 else
   System.out.println("Highest number="+d);
else
  if(b>c)
    if(b>d)
     System.out.println("Highest number="+b);
    else
     System.out.println("Highest number="+d);
  else
    if(c>d)
     System.out.println("Highest number="+c);
    else
     System.out.println("Highest number="+d);
System.out.println("====================");
}//Close of main
}//Close of class
```

//OUTPUT

Enter four numbers ::69

99

79

89

Highest number=99

==========

Enter four numbers ::154555

151555

548545

158585

Highest number=548545

==========

/*5.Write a java application to accept five numbers, check and display the smallest of the given five numbers. */

```
import java.util.Scanner;
class LowestOf5No{
public static void main(String args[]){
Scanner s=new Scanner(System.in);
System.out.println();
System.out.print("Enter five numbers ::");
int a=s.nextInt();
//System.out.println(a);
```

```
int b=s.nextInt();
//System.out.println(b);
int c=s.nextInt();
//System.out.println(c);
int d=s.nextInt();
//System.out.println(d);
int e=s.nextInt();
//System.out.println(e);
if(a<b)
 if(a<c)
  if(a<d)
   if(a<e)
    System.out.println("Smallest number="+a);
    else
    System.out.println("Smallest number="+e);
  else
   if(d<e)
    System.out.println("Smallest number="+d);
    else
    System.out.println("Smallest number="+e);
 else
  if(c<d)
   if(c<e)
    System.out.println("Smallest number="+c);
    else
```

```
      System.out.println("Smallest number="+e);
    else
     if(d<e)
      System.out.println("Smallest number="+d);
      else
      System.out.println("Smallest number="+e);
else
  if(b<c)
    if(b<d)
     if(b<e)
      System.out.println("Smallest number="+b);
      else
      System.out.println("Smallest number="+e);
    else
     if(d<e)
      System.out.println("Smallest number="+d);
      else
      System.out.println("Smallest number="+e);
  else
    if(c<d)
     if(c<e)
      System.out.println("Smallest number="+c);
      else
      System.out.println("Smallest number="+e);
    else
```

```
    if(d<e)
     System.out.println("Smallest number="+d);
     else
     System.out.println("Smallest number="+e);
System.out.println("====================");
```
}//Close of main

}//Close of class

//OUTPUT

```
Enter five numbers ::154
555
854
945
454
Smallest number=154
====================

Enter five numbers ::16665
58585
15154
84889
59596
Smallest number=15154
====================
```

/*6.Write a java application software to calculate and print electricity bill of the consumer as per the chart given below:-

UNIT	==========	RATE PER UNIT
0-100		6.0
101-200		5.50
201-above		5.0

Apart from this a fixed meter rental charge Rs.200/- is to be paid by consumer per month.

=======Electricity Bill====dated:.....

Meter No. :.....

Unit Consumed :.....

Rate per Unit :.....

Bill amount in Rs. :.....

Meter rental charge in Rs. :.....

Net Bill amount in Rs. :..... */


```
import java.util.*;
class ElectricityBill{
public static void main(String args[]){
Scanner s=new Scanner(System.in);
double unit,rate,billAmt,net;
```

```
unit=rate=billAmt=net=0.0;
final double rental=200.0;
boolean flag=true;
System.out.println();
System.out.print("Enter meter no.      ::");
long mno=s.nextLong();
//System.out.println(mno);
if(mno>0){
System.out.print("Enter unit consumed        ::");
unit=s.nextDouble();
//System.out.println(unit);
if(unit>=0)
  if(unit<=100)
    rate=6.0;
  else
    if(unit<=200)
      rate=5.50;
      else
      rate=5.0;
else{
flag=false;
System.out.println("Invalid unit entered,try again!");}
}else{
flag=false;
System.out.println("Invalid Meter No. entered,try again!");}
```

```
if(flag){
billAmt=unit*rate;
net=billAmt+rental;
System.out.println("=======Electricity Bill====dated:"+new Date());
System.out.println("Meter no.                    :"+mno);
System.out.println("Unit consumed                :"+unit);
System.out.println("Rate per Unit                :"+rate);
System.out.println("-----------------------------------------------------");
System.out.println("Bill Amount is Rs.           :"+billAmt);
System.out.println("Meter rental charge in Rs.       :"+rental);
System.out.println("-----------------------------------------------------");
System.out.println("Net Bill Amount in Rs.    :"+net);
System.out.println("=============================================");
```

}//Close of if(flag)

}//Close of main

}//Close of class

//OUTPUT

```
Enter meter no.     ::1333551
Enter unit consumed       ::49.0
=======Electricity Bill====dated:Thu Jan 14 21:44:30 IST 2016
Meter no.                    :1333551
Unit consumed                :49.0
Rate per Unit                :6.0
-----------------------------------------------------
```

Bill Amount is Rs. :294.0

Meter rental charge in Rs. :200.0

Net Bill Amount in Rs. :494.0

==========

Enter meter no. ::1333552

Enter unit consumed ::161.0

=======Electricity Bill====dated:Thu Jan 14 21:44:44 IST 2016

Meter no. :1333552

Unit consumed :161.0

Rate per Unit :5.5

Bill Amount is Rs. :885.5

Meter rental charge in Rs. :200.0

Net Bill Amount in Rs. :1085.5

==========

Enter meter no. ::1333553

Enter unit consumed ::350.0

=======Electricity Bill====dated:Thu Jan 14 21:45:09 IST 2016

Meter no. :1333553

Unit consumed :350.0

Rate per Unit :5.0

Bill Amount is Rs. :1750.0

Meter rental charge in Rs. :200.0

Net Bill Amount in Rs. :1950.0

==========

/*7.Write a java application for a MALL offering discount on purchase of goods as per the chart given below:-

Total Purchase Amount ==========	**Discount in Percentage**
1000-2000	**10%**
2001-5000	**15%**
5001-above	**20%**

Read/Scan item/product code,item name ,item company name,m.r.p, quantity taken.

#further 1% vat is to be paid by the consumer an getting bil:-

========Bill/Invoicing details====dated:.....

Item Code: :.....

Item Name: :.....

Item Type: :.....

Company Name: :.....

M.R.P in Rs.: :.....

Quantity taken: :.....

Total amount in Rs.: :.....

Discount in percentage: :....%

Discount amount in Rs.: :.....

Payable amount in Rs.: :.....

1% VAT in Rs.: :.....

==========

Net Bill/Invoice amount in Rs.: :..... */

```
import java.util.*;
class Invoice{
public static void main(String args[]){
Scanner s=new Scanner(System.in);
double total,rate,payable,discount,net,vat,mrp,quantity;
total=rate=payable=discount=net=vat=mrp=quantity=0.0;
String cName="",itemName="";
boolean flag=true;
System.out.println();
System.out.print("Enter Item Code ::");
int itemCode=s.nextInt();
//System.out.println(itemCode);
if(itemCode>0){
System.out.print("Enter Item Name ::");
```

```
s.nextLine();
itemName=s.nextLine().toUpperCase();
//System.out.println(itemName);
System.out.print("Enter Company Name              ::");
cName=s.nextLine().toUpperCase();
//System.out.println(cName);
System.out.print("Enter M.R.P. of Item             ::");
mrp=s.nextDouble();
//System.out.println(mrp);
if(mrp>0){
System.out.print("Enter Quantity taken             ::");
quantity=s.nextInt();
//System.out.println(quantity);
if(quantity>0){
total=mrp*quantity;
if(total>=1000)
 if(total<=2000)
   rate=10.0;
 else
   if(total<=5000)
     rate=15.0;
   else
     rate=20.0;
}else {
flag=false;
```

```
System.out.println("Invalid quantity entered, try again !");}
}else{
flag=false;
System.out.println("Wrong M.R.P. is entered, try again !");}
}else {flag=false;
System.out.println("Invalid Item Code is entered, try again !");}
if(flag){
discount=total*rate/100;
payable=total-discount;
vat=payable*1/100;
net=payable+vat;
System.out.println("======Bill/Invoicing details===dated:"+new Date());
System.out.println("Item Code                    :"+itemCode);
System.out.println("Item Name                :"+itemName);
System.out.println("Company Name                 :"+cName);
System.out.println("M.R.P. in Rs.                :"+mrp);
System.out.println("Quantity taken               :"+quantity);
System.out.println("-------------------------------------------------");
System.out.println("Total amount in Rs.                  :"+total);
System.out.println("Discount in percentage       :"+rate+"%");
System.out.println("Discount in Rs.              :"+discount);
System.out.println("-------------------------------------------------");
System.out.println("Payable Amount in Rs.        :"+payable);
System.out.println("1% vat in Rs.                :"+vat);
System.out.println("-------------------------------------------------");
```

```
System.out.println("Net Invoice amount in Rs.              :"+net);
System.out.println("=========================================");
```

}//Close of if(flag)

}//Close of main

}//Close of class

//OUTPUT

```
Enter Item Code          ::1
Enter Item Name          ::CANVAS SHOE
Enter Company Name       ::SPARK
Enter M.R.P. of Item             ::1500.0
Enter Quantity taken             ::1.0
======Bill/Invoicing details===dated:Fri Jan 15 01:07:32 IST 2016
Item Code                        :1
Item Name                :CANVAS SHOE
Company Name                     :SPARK
M.R.P. in Rs.            :1500.0
Quantity taken                   :1.0
-----------------------------------------------------
Total amount in Rs.                      :1500.0
Discount in percentage           :10.0%
Discount in Rs.                  :150.0
-----------------------------------------------------
Payable Amount in Rs.            :1350.0
1% vat in Rs.            :13.5
```

Net Invoice amount in Rs. :1363.5

==========