

IIP
Test Unit 4 - Possible solution
Year 2013-2014

Name:

1. What is the output of the following code when x of datatype `int` is equal to 0? And when it is equal to 1?

```
if (x>0)
    System.out.print("x is positive");
else System.out.print("x is ");
    System.out.print(x);
```

For x==0: x is 0 For x==1: x is positive1

2. Write a Java program class in whose main method three integer values are read and show the minimum and maximum number of the set of three numbers. Employ decision structures, no `Math` methods.

```
import java.util.*;

public class MinMax3 {
    public static void main(String [] args) {
        int a, b, c;
        Scanner kbd = new Scanner(System.in).useLocale(Locale.US);

        System.out.print("Write first number: ");
        a=kbd.nextInt();
        System.out.print("Write second number: ");
        b=kbd.nextInt();
        System.out.print("Write third number: ");
        c=kbd.nextInt();

        if ((a<=b) && (a<=c)) {
            System.out.println("Minimum: "+a);
            if (b<=c) System.out.println("Maximum: "+c);
            else System.out.println("Maximum: "+b);
        }
        else if ((b<=a) && (b<=c)) {
            System.out.println("Minimum: "+b);
            if (a<=c) System.out.println("Maximum: "+c);
            else System.out.println("Maximum: "+a);
        }
        else {
            System.out.println("Minimum: "+c);
            if (a<=b) System.out.println("Maximum: "+b);
            else System.out.println("Maximum "+a);
        }
    }
}
```

3. Write a Java program class that reads an integer number *max* and, after that, as many integer numbers as necessary until their sum is greater than *max*.

```
import java.util.*;

public class ToMax {
    public static void main(String [] args) {
        int n, m, s;
        Scanner kbd = new Scanner(System.in).useLocale(Locale.US);

        System.out.print("Write max number: ");
        m=kbd.nextInt();

        s=0;
        while (s<=m) {
            System.out.print("Write number: ");
            n=kbd.nextInt();
            s+=n;
        }
    }
}
```

4. Write a Java program class that reads a sentence and writes the sentence without letters 'a'. E.g., "A big man came from the sea" will be written as "A big mn cme from the se". Do not use **replace** method, but a loop for checking each character of the sentence.

```
import java.util.*;

public class Noa {
    public static void main(String [] args) {
        String s;
        int i;
        Scanner kbd = new Scanner(System.in).useLocale(Locale.US);

        System.out.print("Write sentence: ");
        s=kbd.nextLine();

        i=0;
        while (i<s.length()) {
            if (s.charAt(i)!='a') System.out.print(s.charAt(i));
            i++;
        }
    }
}
```