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# Practical 1

## OOP Lab

### Practical 1 A

Write a Java program to display greeting message like: “Hello! Java” on console.

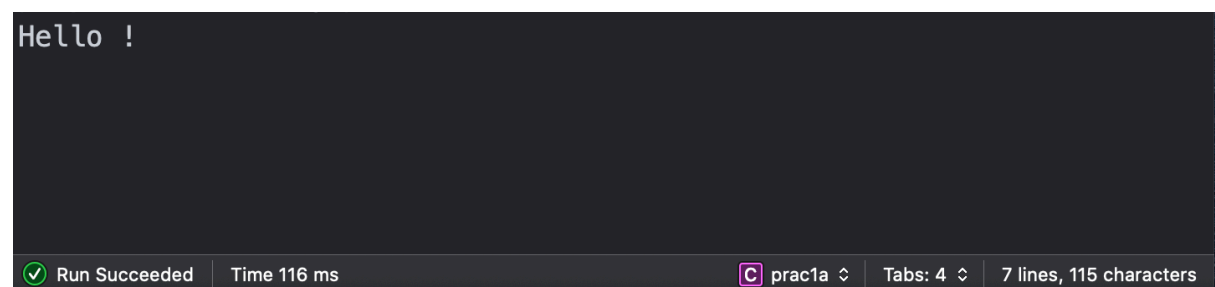
#### CODE

```
class prac1a
{
    public static void main(String args[])
    {
        System.out.println("Hello !");           //prints 'Hello !'
    }
}
```

#### INPUT :

*none*

#### OUTPUT :



```
Hello !
```

Run Succeeded | Time 116 ms | prac1a | Tabs: 4 | 7 lines, 115 characters

#### CONCLUSION :

From the practical 1 A, we understood the work of `System.out.print`, which is used to print a line on the output window.

## Practical 1 B

Write a Java program to display all primitive type variables. Also display your name in the last line.

### CODE

```
class prac1b {
    public static void main(String[] args) {
        /* printing all integer data types */
        byte b =127;           //range : -128 to 127
//        byte b = (byte) 128; this will work as it was working in C language.
        short s = 32001;
        int i = 400;
        long l = 894567;

        System.out.println("examples : ");
        System.out.println("Byte value is " + b + "." + " Short value is" + s );
        // If the first statement is string then basically the another stuff after it will
be treated as concatenation operator
        /*like : System.out.println("Byte value is " + b + s );
        -> output : Byte value is 1273001
        for doing the actual addition : System.out.println("Byte value is " + (b +
s) );
        [will give a perfect addition.]
        */

        //Actual program :
        System.out.println(" Byte value is " + b + ".");
        System.out.println(" Short value is " + s + ".");
        System.out.println(" Integer value is " + i + ".");
        System.out.println(" Long value is " + l + ".");

        float f = 234.89f;    //f is compulsory because its strongly typed language
as otherwise it will be considered as double so will give an error
        //or we can write : float f = (float) 234.89;
        /*
        i = (int) f; //for converting float to int (typecasting)
        */
        double d = 89343.32423;
        System.out.println(" Float value is " + f + ".");
    }
}
```

```
        System.out.println(" Double value is " + d + ".");

        char c = 'Y';
        char c1 = 90;
        System.out.println(" Char value is " + c + ".");
        System.out.println(" Char another value is " + c1 + ".");


        int j = c1; //Compatible types
        System.out.println(" Char's integer value is " + j + ".");
    }
}
```

## INPUT :

*none*

## OUTPUT :

```
examples :
Byte value is 127. Short value is32001
Byte value is 127.
Short value is 32001.
Integer value is 400.
Long value is 894567.
Float value is 234.89.
Double value is 89343.32423.
Char value is Y.
Char another value is Z.
Char's integer value is 90.
```

✓ Run Succeeded | Time 192 ms |  prac1b | Tabs: 4 | 46 lines, 1932 characters

## CONCLUSION :

From the practical 1 B, we understood about the different types of variables from primitive data type. Which includes Byte, Short , Integer, Long, Float, Double, Char also the use of typecasting, which is used to convert the data type like char to int etc. also we learn about their writing format.

## Practical 1 C

Justify the following statement in the context of Java. “boolean can be true (Non-zero) or false(Zero)”.

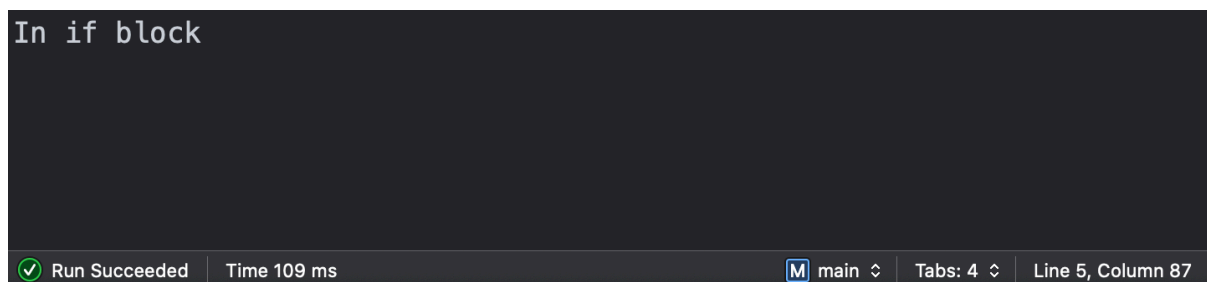
### CODE :

```
class prac1c {  
    public static void main(String[] args) {  
        boolean b=true;//we need to write exact in the same way as this like  
-> true or false  
        //        boolean b=false;  
        //we cannot write 0 or 1 or True or Flase etc. like we used to write in  
C  
        if(b)  
            System.out.println("In if block");  
        else  
            System.out.println("In Else block");  
    }  
}
```

### INPUT :

*none*

### OUTPUT :



The screenshot shows a dark-themed IDE window. The main area displays the text "In if block". At the bottom, a status bar shows a green checkmark icon followed by "Run Succeeded", "Time 109 ms", a blue icon with 'M' followed by "main", "Tabs: 4", and "Line 5, Column 87".

### CONCLUSION :

From the practical 1 C, we understood about boolean statement in Java, which used to give two different choice one as true and other as false.unlike C programming , here we cannot use 0 and 1 in java to represent false and true.