

# Java Refresher

## 01 - Introduction

14:08

### Agenda

1. Output in java
2. Data Types
3. Typecasting
4. Input
5. Quizzes

## Output In Java

```
System.out.println("Hello World!!");
```

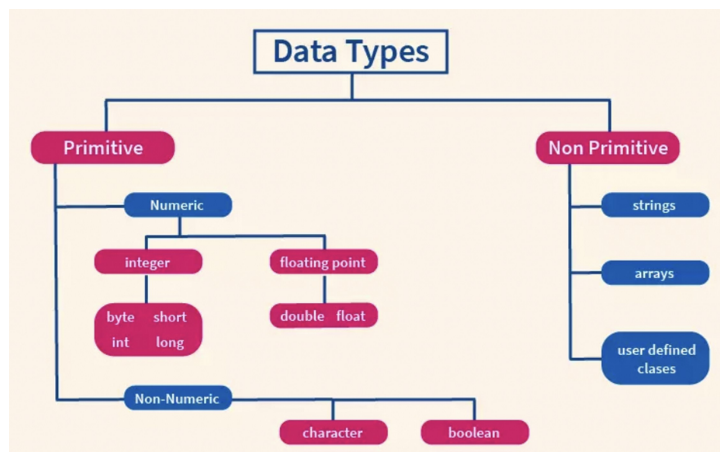
- **System** is a class wrapped in java.util library.
- **Out** is a **public static** field : It accepts output data.
- Print (prints data), println (prints in new line) and printf (provides string formatting)

## Comments in java

- // -> used for adding single line comment.
- /\* \*/ -> used for adding multi line comment. (ctrl + /)

## Data Types in Java

- Primitive Data type : Predefined datatypes in java programming language.  
Ex : byte, short, int, long, double, float, boolean, char
- Non-Primitive Data type : Defined by programmers.  
Ex : String, Arrays, class, etc.



## Type Casting In Java

- Typecasting is a way of converting one datatype into another.
- Example 1 : **Implicit Type Casting**  
Here typecasting is handled by java compiler itself.

```
//Case 1 : small --> large
int i = 5,
long l = i;
System.out.println(l);

//Case 2 : large --> small
long l = 1000000000000l
int i = l
System.out.println(i);
```

**Case 1 :** Here we are trying to implicitly (without forcing) typecast from int to long. Since value casted will always be in constraint, so output will be 5.

**Case 2 :** Implicit casting for incompatible constraints long->int. In this case if value is larger than that of int range then it will throw datatype incompatible error.

- Example 2 : **Explicit Typecasting**  
Here we forcefully typecast

```
long l = 1000l;
int i = (int)l; // forcing to convert; explicit typecasting
System.out.println(i); // 1000 as output
```

If value is out of range it will store garbage value.

## Input In Java

- Scanner Class is used to take inputs in java. It is wrapped in java.util library.
- Following are the methods used to take input for different types :

```
scn = new Scanner(System.in);
int i = scn.nextInt();
long t = scn.nextLong();
float f = scn.nextFloat( ) ;
double d = scn.nextDouble();
//scn. next ( ) --> Reads only 1 word from input
String s = scn.next();
System. out. print(s);

//scn.nextLine() --> Reads entire line from input
String s1 = scn.nextLine();
System.out.print(s1);
```

Quizzes :

Take 2 names X and Y as input and print X loves Y.

Take name X and age Y as input and print X age is Y.

Operators in Java : <https://docs.oracle.com/javase%2Ftutorial%2F/java/nutsandbolts/operators.html>