

* Operators & operands:

- (1) Operands:- Values on which operations are performed by operators.
- (2) operators:- Symbols which are used to perform arithmetical, logical or relational operations.
Eg:- +, -, /, %, &, !, >=, etc.

Mathematical $\rightarrow$ To perform arithmetical operations. Eg $+, *, /$, etc.

Relational $\rightarrow$ To compare two values.
 $<, >, <=, >=, !=, ==$.

Logical $\rightarrow$ These operators are used to take decision on more than one condition.

Eg: AND NOT OR
($\&$) (!) (||)

* Precedence order for mathematical operators

* / % $\rightarrow$ same precedence (left to right whichever comes first)

+ - $\rightarrow$ same precedence (left to right whichever comes first)

* Tokens $\Rightarrow$ They are smallest individual unit of a program which can be explained individually.

(1) Reserved words/Key words:- They are words that are already reserved and blocked by java for its use. They cannot be used for purpose other than for which they are defined.
Eg:- ~~true~~, class, int, etc.

(2) Identifiers:- They are the names that we provide. Eg: class names, variable names, methods names

(3) Literals:- Literals are constants.
Eg:- integers (21, 13), floating points (10.5, 16.2), characters ('b', 'c', '*'), string ("Hello world"), boolean (true, false)

(4) Operators:- (+, -, *, /, %, etc.)

(5) Separators:- (, ; {} etc.)

* `boolean a = "true";`
`System.out.println(a);` → error

Float	Double
1. Smaller range of no.s. are stored.	larger range of no.s are stored.
2. upto 7 digits after decimal (Single Precision)	upto 16 digits after decimal. (Double Precision)
3. Float is faster	Double is comparatively slower.
4. Suffix f is used.	Suffix d is used.
5. Requires 4 bytes.	Requires 8 bytes.
Eg: <code>float c = 6.2536567f</code>	Eg: <code>double d = 9.6531429398764321d</code>

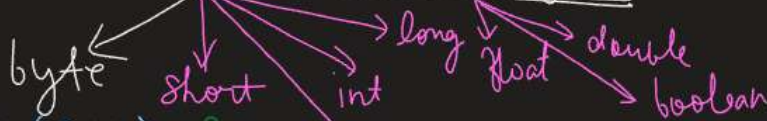
* Variable $\Rightarrow$ A variable is a name given to a memory storage location.
It indicates a location in memory where the values are stored.

Primitive

Reference

* Primitive $\Rightarrow$ They are the most basic data type in java.
They are inbuilt by java.

Primitive Data Types



byte 1 byte (8 bits)

short 2 bytes (16 bits)

int 4 bytes (32 bits)

long 8 bytes (64 bits)

$\Rightarrow$ Integer

float 4 bytes (32 bits)

double 8 bytes (64 bits)

$\Rightarrow$ Floating points

char 2 bytes (16 bits)

$\Rightarrow$ character

Boolean not defined

$\Rightarrow$ Boolean