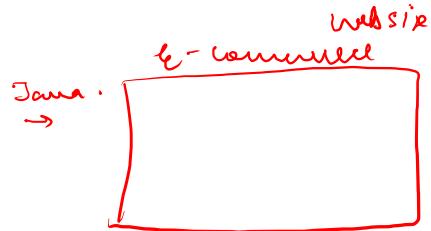


Java, C++, C,



↳ communicate computer :

↳ programming :

↳ Java, C++, C, Python, C#, Java

↳ Java? → * Mostly companies work on java -

↳ Object Oriented Programming -

↳ Benefit → Android Application - (Google Play Store)

→ Spring Boot

Printing

```
# System.out.println(" ");
```

System.out.println("Hello everyone") ;

O/P → Hello everyone.

Syntax

System.out.println(" ") ;

Note* → System.out.println → need to print in new line -

System.out.print → print in a single line; \n

System.out.print(' ') ≡ System.out.println();

Print 5 line
about yourself

↳

System.out.print("Hello everyone"),
System.out.print("My name is
Kartikya Gupta") ;

String

O/P -
Hello everyone My name is Kartikya Gupta.

→ System.out.println("Nayakster");
→ System.out.print("Coding");
→ GeeksforGeeks
→ Coding
→ Geeksfor Coding

1) "Hello world . I am here"

2) Hello
world
I
am
here.

3) I star in a single line * * * *

4) I star in multiple line *
*
*
*

5) Print the following
pattern

* * * *
x
x
x
x x x x

System.out.println

print \n → single

\n

Variables → data container that saves the data values.

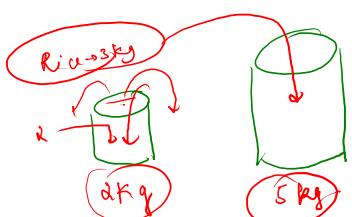
Real



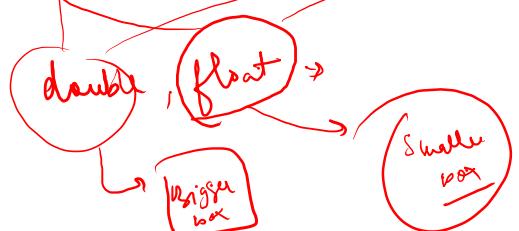
datatype 10
= 'a'
10.22
key word ex
integers → int
charact → char
decimal → double
string → string
data
boolean → true/false
int a = 10;
char ch = 'a'
double f = 10.22;
string str = "any".
boolean as = true;

datatype → what type of info you are storing.

String = combination of character.



int, long = 10
↳ int = 10



[2^{-31} , $2^{31}-1$] → [2^{-13} , $2^{13}-1$]
int / long → used to store integer.
but no difference.
in their range.

Primitive data types in Java

Type	Description	Default	Size	Example Literals
boolean	true or false	false	1 bit	true, false
byte	twos complement integer	0	8 bits	(none)
char	Unicode character	\u0000	16 bits	'a', '\u0041', '\101', '\\', '\'', '\n', 'ß'
short	twos complement integer	0	16 bits	(none)
int	twos complement integer	0	32 bits	-2, -1, 0, 1, 2
long	twos complement integer	0	64 bits	-2L, -1L, 0L, 1L, 2L
float	IEEE 754 floating point	0.0	32 bits	1.23e100f, -1.23e-100f, .3f, 3.14F
double	IEEE 754 floating point	0.0	64 bits	1.23456e300d, -1.23456e-300d, 1e1d

Addition

6

$a = 10$, $b = 20$ operators +, -, /, *, %
 $a + b$

Subtract

$$a - b$$

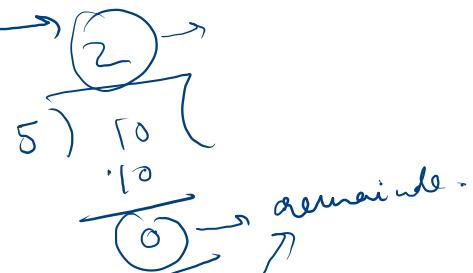
$$b - a$$

Multiplication $\Rightarrow a * b$

✓ Division →

$a/b \rightarrow$ Quotient

a \bullet (10) b \rightarrow remainder



① Addⁿ of two nos; $\Rightarrow a=10$, $b=20$

$$\overline{10) \overline{25} \atop \underline{20} \quad 5}$$

② Multiply 3 nos; $\Rightarrow a=10$, $b=20$, $c=30$

$+, -, \times, \%, \div$

③ Subtract two nos. $\Rightarrow a=40$, $b=60$

$$\begin{array}{l} \rightarrow a-b \\ \rightarrow b-a \end{array}$$

123456⁰/010

④ Divide $25 \mid_{10}$ & Remainder.

$$9) \overline{438} \atop \underline{36} \quad .$$

$$10) \overline{123456} \atop \underline{10} \quad .$$

⑤ Remainder \rightarrow 438 by 9

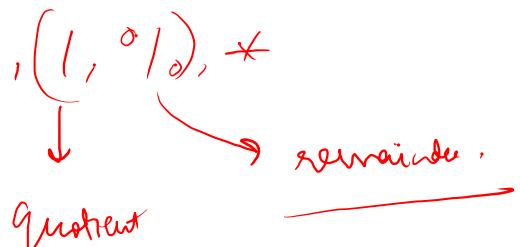
$$\begin{array}{c} 438 \\ 72 \\ \hline 6 \end{array} \quad \begin{array}{c} \text{Last digit} \\ \uparrow \\ 6 \end{array} \quad \begin{array}{c} \text{num}^0/010 \\ \rightarrow 6 \end{array}$$

$$\begin{array}{r} 23 \\ 20 \\ \hline 34 \\ 30 \\ \hline 45 \\ 40 \\ \hline 56 \\ 50 \\ \hline 60 \\ 50 \\ \hline 0 \end{array}$$

⑥ * Print the last digit of a particular no.

Ex: $43 @ 93 \underline{(5)} \rightarrow (5) \rightarrow 01P$

$390 \rightarrow 0$

- ↳ Programming language →
- ↳ Why Java → ?
- ↳ Benefits of Java → ?
- ↳ Print → `System.out.println`.
→ `System.out.print`.
- ↳ Variables → what are variables
→ datatypes
- ↳ Operators → $+,-,\left(\frac{1}{0},\% \right),*$


Quotient Remainder