

e.g.: \leftarrow , \rightarrow

e.g.: Python, Ruby, Java

Hence Python uses ! intep order: $>$, $<$

: () { } \leq , \geq , \neq

Operations

Special characters or symbols used to perform a particular operation like operations.

e.g: $a+b=c$

As we see, it is able to use operators like +, -, *, /, %

These are called operators

Arithematic operators

Types of operators.

* Arithmetic operators.

To do arithmetic operations. like sum, difference, product etc.

Those are,

+ - / * % //

e.g: $1 + 2 = 3$

* Assignment operators.

Assign values on to variables etc.

Those are,

= += -= *= /= %= \backslash

e.g: $a = 1, a = 2$

* Relational operators

Like comparison operators. To compare two

variables also used with conditioned clause.

Those are,

> < <= >= != ==

e.g: $a > b \quad i \geq 1 \quad i != 2 \quad \text{if } (a == 1) :$

* Logical operators.

Only works under certain conditions.

Those are

and : if ~~both~~ all conditions are satisfied
returns true

or : if any one of conditions are
returns true

note : if both conditions are false returns false

✓ bitwise operators

performs operations on binary ~~bits~~ digits of a number
for low level data manipulation

These are $\&$, $|$, \sim , $>>$, $<<$, $^$.

e.g.: $6 \& 5 = 4$ 13 and 8

$$\begin{array}{r} 110\& \\ 101 \\ \hline 100 \end{array}$$

 ~~$\begin{array}{r} 011 \\ 101 \\ \hline 011 \end{array}$~~

$\rightarrow 4$

$$\begin{array}{r} 1101 \\ 1000 \\ \hline 1101 \end{array}$$

 $\rightarrow 13$

✓ membership operator

To Returns ~~false~~
To check presence of value with in
a sequence.

These are

in, not in

e.g.: $a = [1, 2, 3, 4, 5]$

a is a : returns ~~false~~
 a not in a : returns ~~true~~

✓ Identity operators

Two compares only & loc of two operators
similar to ' $=$ ' operator. instead \equiv compare
values

These are

is, is not

e.g.: $a = 10$

$b = 2$

a is b returns ~~false~~

~~a is not b~~ a True,
 a is ~~not~~ b