



`print()` , `type()` , `input()`

`a = 10` : static value

`a = input()` : dynamic value

(or)

`a = input("Enter a number value:")`

↳
msg

Note: `input()` always receives value in string format.

`age = int(input("msg"))`

↳ dtype: `int`

Operators

(a) Arithmetic operator: `+`, `-`, `*`, `/`, `//`, `%`, `**`

`/` : exact quotient (decimal)

`//` : floor quotient (integer)

`%` : Modulo (Remainder)

$$\frac{10}{3} = 3.33 \dots$$

$$3 \overline{)10} (3 = 3$$

$$\begin{array}{r} 9 \\ \underline{10} \\ 1 \end{array} \rightarrow \%$$

% : Modulo (Remainder)

$\frac{1}{1} \rightarrow \%$

** : Exponentiation (power)

$(3)^2 \Rightarrow 3 ** 2 \Rightarrow 9$

$(3)^4 \Rightarrow 3 ** 4 \Rightarrow 64$

num with num : all

num with str : *

str with str : + (concatenation)

num
int
float
bool

② Assignment Operator (numbers)

=, +=, -=, *=, /=

a = 10

a += 10 \Rightarrow a = a + 10
10

o/p \rightarrow 20

Note: To write a comment in code cell we can use #.

③ Comparison Operator (numbers)

==, >, <, >=, <=, !=

a = 10

b = 20

a > b

\rightarrow False

a != b

\rightarrow True

④ Logical Operator (number)

and, or, not

\downarrow
Both

\downarrow
One or Both

\rightarrow Opposite of result

i/p	i/p	and	or
T	T	T	T

ex: a = 10, b = 5

Y/P	I/P	and	or
T	T	T	T
T	F	F	T
F	T	F	T
F	F	F	F

ex:

$a = 10, b = 20$

$a > b$ and $b < a$

↳ True

$a > b$ ^{or} $b > a$

↳ False
↳ True

⑤ Membership Operator (strings)

in, not in

es: 'U' in 'Uwaish'

↳ True

⑥ Identity Operator (number)

is, is not

es: 10 is 10

↳ True.

ToDo : Bitwise Operator