common sense

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~ (tilde) - тильда
! (exclamation mark) – восклицательный знак
@ (at) – собачка
# (number или hash) - решетка, диез
$ (dollar) – доллар
% (percent) – процент
^ (caret) – знак вставки
& (ampersand) – и
* (asterisk) – звездочка
( (open или left parenthesis) – открывающая или левая круглая скобка
) (close или right parenthesis) – закрывающая или правая круглая скобка
(underscore или horizontal bar) – нижнее подчеркивание
+ (plus) – плюс
` (acute) – гравис
- (dash или hyphen) - тире или дефис
= (equals) – знак равенства
{ (open или left curly brace) – открывающая или левая фигурная скобка
} (close или right curly brace) – закрывающая или правая фигурная скобка
| (pipe или vertical bar) – вертикальная черта
[ (open или left square bracket) – открывающая или левая квадратная скобка
] (close или right square bracket) – закрывающая или правая квадратная скобка
\ (reverse solidus или backslash) – обратный слеш/ слэш
/ (solidus или forward slash) – слеш/ слэш
: (colon) – двоеточие
" (quote) – кавычки
; (semi colon) – точка с запятой
(apostrophe или single quote) – апостроф
< (less than) – знак меньше
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- > (greater than) знак больше
- ? (question mark) вопросительный знак
- , (сотта) запятая
- . (dot, period или full stop) точка (слово «dot» используется, как правило, в названиях email адресов или webaдресов; full stop (брит. анг.) или period (амер. англ.) это точка, которая ставится в конце предложения)

Python Arithmetic Operators

Assume variable a holds 10 and variable b holds 20, then -

Symbol	Symbol Name	Symbol	Symbol Name
"	arcsecond	∞	proportional to
AB	line segment	<u>∞</u>	lemniscate
1	perpendicular	«	much less than
il	parallel	≫	much greater than
· · · · · · · · · · · · · · · · · · ·	congruent to	()	parentheses
~	similarity		brackets
Δ	triangle	{}	braces
x-y	distance	x!	exclamation mark
π	pi constant	x	single vertical bar
rad	radians	f (x)	function of x
grad	grads	(f ∘g)	function composition
X	x variable	(a,b)	open interval
A ≡	equivalence	[a,b]	closed interval
	equal by definition	Δ	delta
:=	equal by definition	Δ	discriminant
~	approximately equal	Σ	sigma e
æ	approximately equal	$\sum \sum$	sigma
.~	approximately equal	П	capital pi

[Show Example]

Operator	Description	Example
+ Addition	Adds values on either side of the operator.	a + b = 30
- Subtraction	Subtracts right hand operand from left hand operand.	a - b = -10
* Multiplication	Multiplies values on either side of the operator	a * b = 200
/ Division	Divides left hand operand by right hand operand	b / a = 2

% Modulus	Divides left hand operand by right hand operand and returns remainder	b % a = 0
** Exponent	Performs exponential (power) calculation on operators	a**b =10 to the power 20
//	Floor Division - The division of operands where the result is the quotient in which the digits after the decimal point are removed. But if one of the operands is negative, the result is floored, i.e., rounded away from zero (towards negative infinity) –	9//2 = 4 and 9.0//2.0 = 4.0, - 11//3 = -4, - 11.0//3 = -4.0

Python Comparison Operators

These operators compare the values on either sides of them and decide the relation among them. They are also called Relational operators.

Assume variable a holds 10 and variable b holds 20, then -

[Show Example]

Operato r	Description	Example
==	If the values of two operands are equal, then the condition becomes true.	(a == b) is not true.
!=	If values of two operands are not equal, then condition becomes true.	(a != b) is true.
<>	If values of two operands are not equal, then condition becomes true.	(a <> b) is true. This is similar to != operator.
>	If the value of left operand is greater than the value of right operand, then condition becomes true.	(a > b) is not true.
<	If the value of left operand is less than the value of right operand, then condition becomes true.	(a < b) is true.
>=	If the value of left operand is greater than or equal to the value of right operand, then condition becomes true.	(a >= b) is not true.
<=	If the value of left operand is less than or equal to the value of right operand, then condition becomes true.	(a <= b) is true.

Python Assignment Operators

Assume variable a holds 10 and variable b holds 20, then -

Γ	Show	Example	-
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Operator	Description	Example
=	Assigns values from right side operands to left side operand	c = a + b assigns value of a + b into c
+= Add AND	It adds right operand to the left operand and assign the result to left operand	c += a is equivalent to $c = c + a$
-= Subtract AND	It subtracts right operand from the left operand and assign the result to left operand	c = a is equivalent to $c = c - a$
*= Multiply AND	It multiplies right operand with the left operand and assign the result to left operand	c *= a is equivalent to c = c * a
/= Divide AND	It divides left operand with the right operand and assign the result to left operand	$c \neq a$ is equivalent to $c = c / ac / ac$ = a is equivalent to $c = c / a$
%= Modulus AND	It takes modulus using two operands and assign the result to left operand	c %= a is equivalent to c = c % a
**= Exponent AND	Performs exponential (power) calculation on operators and assign value to the left operand	c **= a is equivalent to c = c ** a
//= Floor Division	It performs floor division on operators and assign value to the left operand	c //= a is equivalent to c = c // a