OPERATORS IN PYTHON

- Symbol that performs an operation.
- An operator acts on some variables are **operands**.

a) Unary Operator
b) Binary Operator
c) Ternary Operator

CLASIFICATION UPON THE NATURE

1. Arithmetic Operators
2. Assignment Operators
3. Unary Minus Operators
4. Relational Operators
5. Logical Operators
6. Boolean Operators
7. Bitwise Operators
8. Membership Operators
9. Identity Operators

Arithmetic Operators

Operator	Meaning
+	Addition Operator
-	Subtraction Operator
*	Multiplication Operator
/	Division Operator
%	Modulus Operator
**	Exponent Operator
//	Integer Division or Floor Division

Order of Evaluation

a. Parenthesis
b. Exponentiation
c. Multiplication, Division, modulus and floor divisions are at equal priority.
d. Addition and Subtraction
e. Assignment Operator

Assignment Operators

Operator	Meaning
=	Assignment Operator
+=	Addition Assignment Operator : x+=y i.e. x=x+y
-+	Subtraction Assignment Operator
*=	Multiplication Assignment Operator
/=	Division Assignment Operator
%=	Modulus Assignment Operator
**=	Exponentiation Assignment Operator
//=	Floor Division Assignment Operator

NOTE: Python does not have increment operator (++) and decrement operator (--).

UNARY OPERATOR

- Symbol (-).

RELATIONAL OPERATOR

Operator	Meaning
>	Greater than operator
>=	Greater than or equal operator
<	Less than operator
<=	Less than or equal operator
==	Equals Operator
!=	Not Equals Operator

- Relational operators can be chained.

LOGICAL OPERATORS

A. And – True if both the operands are true.
B. Or – True of either of the operands is true.
C. Not – True if operand is false.

BOOLEAN OPERATOR

- True and False
- Act upon 'bool' type literal and they provide 'bool' type output.

BITWISE OPERATORS

- Acts on individual bits (0 or 1).
- Use bitwise operators directly on binary numbers or on integer also.

1. Bitwise Complement Operator (~)
2. Bitwise AND Operator (&)
3. Bitwise OR Operator (|)
4. Bitwise XOR Operator (^)
5. Bitwise Left Shift Operator (<<)
6. Bitwise Right Shift Operator (>>)

MEMBERSHIP OPERATOR

- Useful to test for membership in a sequence.

1. In: True if value is found in the sequence.
2. Not in: True if the value is not found in the sequence.

IDENTITY OPERATOR

- Compare the memory locations of two objects.
- id() function returns identity number.

1. Is: True if the operands are identical.
2. Is not: True if the operand is not identical.