



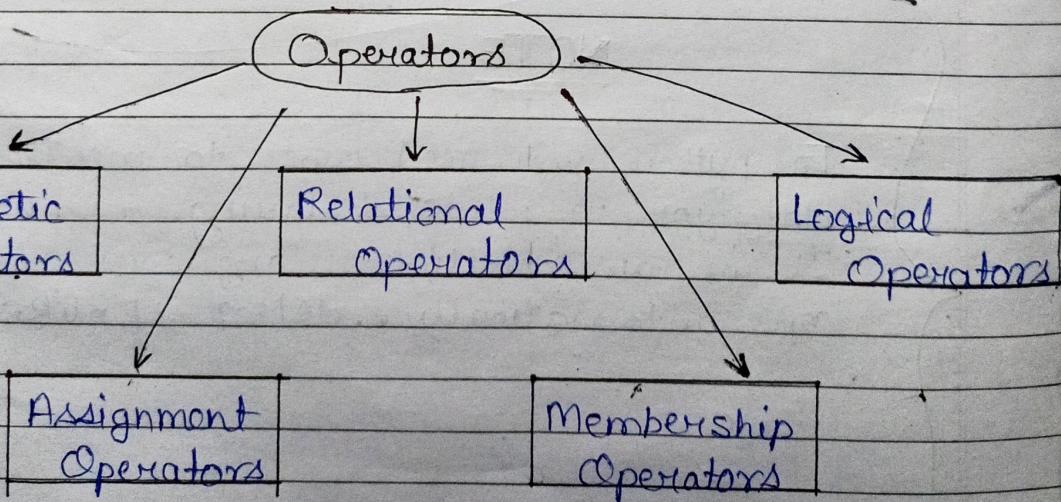
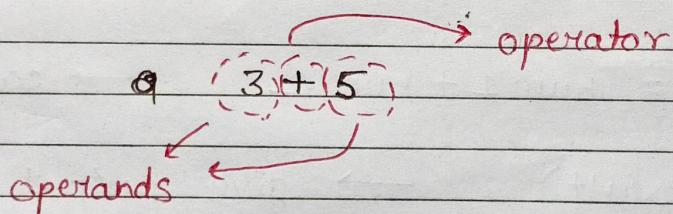
* Operators in Python :-

Operators are special entities which perform a specific function on the set of value / special / individual value.

Here comes two terminologies,

Operator: Entity that performs the operation like +, -, *, etc.

Operands: The values on which the operation is being performed.



(i) Arithmetic Operators :→

Those operators which perform arithmetic i.e. mathematical operation over operands, they are called as arithmetic operator.

Operator	Function
$+$ (Addition)	Adds two values on either side of operator.
$-$ (Subtraction)	Subtract right operand from left operand
$*$ (Product)	Multiplies (product) two values on both side of it.
$/$ (Division)	Divides left operand by right operand and returns the <u>QUOTIENT</u> .
$\%$ (Modulus)	Divides left operand by right operand & returns the <u>REMAINDER</u> .
$//$	Integer Quotient Division.
** (Exponent)	Raise the power of left operand by the right operand.

(iii) Relational Operators :-

Relational Operators compares the value present on either side of operator and determines the relation among them. Return Type :- Boolean.

Operator	Function.
$=$ (Equals to)	If two operators are equal then return true else false.
\neq (Not equal to)	If two operators are not equal then return true else false.
$>$ (Greater than)	If left operand is greater than right then return true else false.
$<$ (Less than)	If left operator is less than right then return true else false.
\geq	Greater than or equals to
\leq	Less than or equals to



(iii) Assignment Operator :-

Assignment operators are used to assign/change or provide value to a variable on left.

Operator	Function
= (Assignment Oper.)	Assigns the right operand to the left one.
+ = (Addition Assignm.)	$a += b$ that means $a = a + b$
- = (Subt. Assignment)	$a -= b$ that means $a = a - b$
* = (Mult. Assignm.)	$a *= b$ that means $a = a * b$
/ = (Division Assign.)	$a /= b$ that means $a = a / b$
% = (Modulo Assign.)	$a \% = b$ that means $a = a \% b$
// =	$a // = b$
** =	$a ** = b$

(iv) Logical Operators :-

Logical operators checks the conditions written on either side of operator.

They return boolean based on the nature of conditions like true or false.

They are to be written in lowercase only { and, or, not}.

Operator

Function

Logical and

If both conditions are True, then it returns TRUE.

Logical or

If any of the two conditions is True, then it returns TRUE.

Logical not

It reverses the logical state of operand. Generally used with booleans.

(V) Membership Operators :→

Membership operator checks whether a value is a member of a sequence or not.

Return type :→ Boolean.

Operator	Function.
in	Returns True if value is found in sequence and False if not found.
not in	Returns True if value is not found in sequence and False if found.