Operators in Python

Python language supports following type of operators.

- Arithmetic Operators
- Comparison Operators
- Assignment Operators
- Logical (or Relational) Operators
- Bitwise operators

Arithmetic Operators

Operator	Description
+	Addition
-	Subtraction
*	Multiplication
/	Division
%	Modulus - Divides left hand operand by right hand operand and returns remainder
**	Exponent - Performs exponential (power) calculation on operators

//	Floor Division - The division of operands where the result is the quotient in which the digits after the decimal point are removed.

Comparison Operators

Operator	Description
==	equal to
!=	not equal to
>	greater than
<	less than
>=	greater than or equal to
<=	less than or equal to

Assignment Operators

Operator	Description	Example	
=	Simple assignment operator	c = a + b	
+=	Add AND assignment operator	c += a	c = c + a

-=	Subtract AND assignment	c -= a	c = c - a
*=	Multiply AND assignment	c *= a	c = c * a
/=	Divide AND assignment operator	c /= a	c = c / a
%=	Modulus AND assignment	c %= a	c = c % a
**=	Exponent AND assignment	c **= a	c = c ** a
//=	Floor Division and assignment	c //=	c = c // a

Python Bitwise Operators:

Bitwise operator works on bits and performs bit by bit operation.

Operator	Description	Example
&	Binary AND Operator.	
|	Binary OR Operator.	
^	Binary XOR Operator.	

~	Binary Ones Complement.	
<<	Binary Left Shift Operator.	
>>	Binary Right Shift Operator.	

Python Logical Operators:

Operator	Description	Example
and	Logical AND operator.	
or	Logical OR Operator.	
not	Logical NOT Operator.	

Python Operators Precedence

The following table lists all operators from highest precedence to lowest.

Operator	Description
**	Exponentiation
~	complement
* / % //	Multiply, divide, modulo and floor division

+ -	Addition and subtraction
>> <<	Right and left bitwise shift
&	Bitwise 'AND'
^ |	Bitwise exclusive `OR' and regular `OR'
<= < > >=	Comparison operators
== !=	Equality operators
= += *= …….	Assignment operators
not or and	Logical operators