

# PYTHON OPERATORS PRECEDENCE EXAMPLE

[http://www.tutorialspoint.com/python/operators\\_precedence\\_example.htm](http://www.tutorialspoint.com/python/operators_precedence_example.htm)

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

Operator	Description
**	Exponentiation <i>raisetothe power</i>
~ + -	Ccomplement, unary plus and minus <i>methodnamesforthelasttwoare + @and - @</i>
* / % //	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
is is not	Identity operators
in not in	Membership operators
not or and	Logical operators

Operator precedence affects how an expression is evaluated.

For example,  $x = 7 + 3 * 2$ ; here,  $x$  is assigned 13, not 20 because operator  $*$  has higher precedence than  $+$ , so it first multiplies  $3*2$  and then adds into 7.

Here, operators with the highest precedence appear at the top of the table, those with the lowest appear at the bottom.

## Example

```
#!/usr/bin/python

a = 20
b = 10
c = 15
d = 5
e = 0

e = (a + b) * c / d      #( 30 * 15 ) / 5
print "Value of (a + b) * c / d is ", e

e = ((a + b) * c) / d   # (30 * 15) / 5
print "Value of ((a + b) * c) / d is ", e

e = (a + b) * (c / d);  # (30) * (15/5)
print "Value of (a + b) * (c / d) is ", e

e = a + (b * c) / d;   # 20 + (150/5)
```

```
print "Value of a + (b * c) / d is ", e
```

When you execute the above program, it produces the following result –

```
Value of (a + b) * c / d is 90  
Value of ((a + b) * c) / d is 90  
Value of (a + b) * (c / d) is 90  
Value of a + (b * c) / d is 50
```

```
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