Python Arithmatic Operators
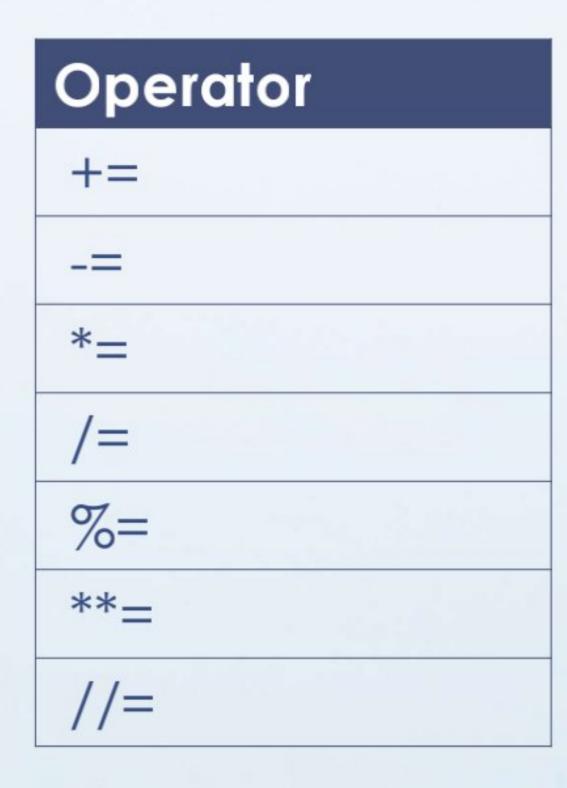
Operator
+ Addition
- Subtraction
* Multiplication
/ Divison
% Modulus
** Exponent
// Floor Divison

operator.py - D:/Documents/Python/operator.py (3.6
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```
#Arithmatic operators + , - , * , / , % , ** , //
a,b=10,3
print ( "Addition: ", a+b)
print ( "Subtraction: ", a-b)
print ( "Division: ", a/b)
print ( "Multiplication: ", a*b)
print ( "Modulus: ", a%b)
print ( "Exponent: ", a**b)
print ( "Floor Division: ", a//b)
```

Python 3.6.4 Shell
File Edit Shell Debug Options Window

```
Python 3.6.4  (v3.6.4:d48eceb, Dec
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>>>
================== RESTART: D
Addition:  13
Subtraction:  7
Division:  3.3333333333333335
Multiplication:  30
Modulus:  1
Exponent:  1000
Floor Division:  3
>>>
```

Python Relational Operators

Operator	Example
==	If(a==n) then True
>	If(a>n) then True
<	If(a<n) then True
>=	If(a>=n) then True
<=	If(a<=n) then True
!=	If(a!=n) then True
<>	If(a<>n) then True

Python Assignment Operators

Operator
+=
-=
*=
/=
%=
**=
//=

```
assignmentoperator.py - D:/Documents/Python/assignmentor
File  Edit  Format  Run  Options  Window  Help

#Assignment operators += , -= , *= , /= , %= , **=
a=10
b=5
c=25
a+=2
print ("Addition: ", a)
a-=2
print ("Subtraction: ", a)
a/=2
print ("Division: ", a)
a*=2
print ("Multiplication: ", a)
a%=3
print ("Modulus: ", a)
b**=2
print ("Exponent: ", b)
```

```
Python 3.6.4 Shell
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Python 3.6.4  (v3.6.4:d48eceb, Dec 19 2017, 06:04:45
Type "copyright", "credits" or "license () " for more info
>>>
============= RESTART: D:/Documents/Python/ass
Addition: 12
Subtraction: 10
Division: 5.0
Multiplication: 10.0
Modulus: 1.0
Exponent: 25
>>>
```

Python Bitwise Operators

Operator	Example
& (AND)	
| (OR)	
^ (XOR)	
~ (Binary Ones Complement)	
<< (Binary Left Shift)	
>> (Binary Right Shift)	

Python Logical Operators

Operator	Example
and (AND)	
or (OR)	
not (NOT)	

Python Membership Operators

Operator	Example
in	
not in	


```
#membership operators are in , not in
# in
lang="Python"
if "th" in lang:
    print ("True")
else:
    print ("False")
# not in
if "a" not in lang:
    print ("True")
else:
    print ("False")
```

Python 3.6.4 Shell

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Python 3.6.4 (v3.6.4:d48eceb, Dec 19 2017, 06:04:45) [MSC v.1900 32 bit (Intel)] on win32
Type "copyright", "credits" or "license () " for more information.
>>>
============= RESTART: D:/Documents/Python/membershipoperator.py =============
True
True
>>>

Python Identity Operators

Operator	Example
Is	
Is not	


```
# Identical operators are is , is not
# is
x=10
y="10"
if x is y:
    print ("True")    # is works like ===
else:
    print ("False")
# is not
if x is not y:
    print ("True")
else:
    print ("False")
```

```
Python 3.6.4  (v3.6.4:d48eceb, Dec 19 2017, 06:04:45)  [MSC v.1900 3
Type "copyright", "credits" or "license ()  " for more information.
>>>
============= RESTART: D:/Documents/Python/Identicaloperators.py
False
True
>>>
```