

18th -- PYTHON OPERATOR

```
In [2]: x1 = 10  
        y1 = 5
```

```
In [3]: x1,y1 = 10,5
```

```
In [4]: a,b = 6
```

```
-----  
TypeError                                Traceback (most recent call last)  
Cell In[4], line 1  
----> 1 a,b = 6
```

```
TypeError: cannot unpack non-iterable int object
```

```
In [5]: a,b = 6,6
```

```
In [6]: print(a)  
        print(b)
```

```
6  
6
```

```
In [7]: x1 + y1
```

```
Out[7]: 15
```

```
In [8]: x1 - y1
```

```
Out[8]: 5
```

```
In [9]: x1 * y1
```

```
Out[9]: 50
```

```
In [10]: x1 / y1
```

```
Out[10]: 2.0
```

```
In [11]: x1 // y1
```

```
Out[11]: 2
```

```
In [12]: x1 % y1
```

```
Out[12]: 0
```

```
In [13]: x1 ** y1
```

```
Out[13]: 100000
```

```
In [14]: 3 ** 2
```

```
Out[14]: 9
```

```
In [15]: 2 ** 2
```

```
Out[15]: 4
```

```
In [16]: x2 = 3
         y2 =3
         x2 ** y2
```

```
Out[16]: 27
```

Assignment Operator

```
In [17]: x = 2
```

```
In [18]: x = x + 2
```

```
In [19]: x
```

```
Out[19]: 4
```

```
In [20]: x += 2
         x
```

```
Out[20]: 6
```

```
In [21]: x *= 2
         x
```

```
Out[21]: 12
```

```
In [22]: x /= 2
         x
```

```
Out[22]: 6.0
```

```
In [23]: x //= 2
         x
```

```
Out[23]: 3.0
```

```
In [24]: x**=2
```

```
In [25]: x =4
```

```
In [26]: 14 / 2
```

```
Out[26]: 7.0
```

```
In [27]: 14 //=2
```

```
Cell In[27], line 1
```

```
14 //=2
```

```
^
```

```
SyntaxError: 'literal' is an illegal expression for augmented assignment
```

Unary operator

```
In [28]: n = 7
```

```
n
```

```
Out[28]: 7
```

```
In [29]: m = -(n)
```

```
m
```

```
Out[29]: -7
```

```
In [30]: -n
```

```
Out[30]: -7
```

Relational operator

```
In [31]: a = 5
```

```
b = 6
```

```
In [32]: a < b
```

```
a > b
```

```
Out[32]: False
```

```
In [33]: a < b
```

```
Out[33]: True
```

```
In [34]: a > b
```

```
Out[34]: False
```

```
In [35]: a == b
```

```
Out[35]: False
```

```
In [37]: a != b
```

Out[37]: True

In [38]: `b = 5`

In [39]: `a == b`

Out[39]: True

In [40]: `a`

Out[40]: 5

In [41]: `b`

Out[41]: 5

In [42]: `a > 5`

Out[42]: False

In [43]: `a >= b`

Out[43]: True

In [44]: `a <= b`

Out[44]: True

In [45]: `a < b`

Out[45]: False

In [46]: `a > b`

Out[46]: False

Logical Operator

In [47]: `a = 5`
`b = 4`

In [48]: `a < 8 and b < 5`

Out[48]: True

In [49]: `a < 8 and b < 2`

Out[49]: False

In [50]: `a < 8 or b < 2`

Out[50]: True

```
In [51]: a>8 or b<2
```

```
Out[51]: False
```

```
In [52]: x = False
x
```

```
Out[52]: False
```

```
In [53]: not x
```

```
Out[53]: True
```

```
In [54]: x
```

```
Out[54]: False
```

python bitwise operator

```
In [55]: ~12
```

```
Out[55]: -13
```

```
In [56]: ~46
```

```
Out[56]: -47
```

```
In [57]: ~54
```

```
Out[57]: -55
```

```
In [58]: ~10
```

```
Out[58]: -11
```

binary number system

```
In [59]: 25
```

```
Out[59]: 25
```

```
In [60]: bin(25)
```

```
Out[60]: '0b11001'
```

```
In [61]: 0b11001
```

```
Out[61]: 25
```

```
In [ ]:
```