

RELATIONAL OPERATORS

```
In [1]: a=5  
      b=6  
      a<b
```

```
Out[1]: True
```

```
In [2]: b<a
```

```
Out[2]: False
```

```
In [3]: b=5  
      a==b
```

```
Out[3]: True
```

```
In [4]: a!=b
```

```
Out[4]: False
```

```
In [5]: a>=b
```

```
Out[5]: True
```

```
In [6]: b>=a
```

```
Out[6]: True
```

```
In [7]: a<=b
```

```
Out[7]: True
```

```
In [8]: b<=a
```

```
Out[8]: True
```

LOGICAL OPERATORS

```
In [9]: a=5,b=6  
      a
```

Cell In[9], line 1

a=5,b=6

^

SyntaxError: invalid syntax. Maybe you meant '==' or ':=' instead of '='?

```
In [10]: a=5  
b=6  
a<8 and b>5
```

```
Out[10]: True
```

```
In [11]: a>8 and b<5
```

```
Out[11]: False
```

```
In [12]: a<8 and b<5
```

```
Out[12]: False
```

```
In [13]: a<8 or b>5
```

```
Out[13]: True
```

```
In [14]: a>5 or b>6
```

```
Out[14]: False
```

```
In [15]: a>=5 or b>=6
```

```
Out[15]: True
```

```
In [16]: a=6  
not a
```

```
Out[16]: False
```

```
In [17]: not b
```

```
Out[17]: False
```

```
In [18]: a
```

```
Out[18]: 6
```

```
In [19]: b
```

```
Out[19]: 6
```

```
In [20]: not b
```

```
Out[20]: False
```

```
In [21]: not a
```

```
Out[21]: False
```

COMPLEMENT OPERATORS

```
In [22]: ~1
```

```
Out[22]: -2
```

```
In [23]: ~8
```

```
Out[23]: -9
```

```
In [24]: ~78
```

```
Out[24]: -79
```

UNARY OPERATORS

```
In [1]: n=7
```

```
-n
```

```
Out[1]: -7
```

BITWISE OPERATORS

```
#COMPLEMENT OPERATOR
```

```
In [2]: ~34
```

```
Out[2]: -35
```

AND OPERATOR

```
In [3]: a=12
```

```
b=13
```

```
a&b
```

```
Out[3]: 12
```

```
In [4]: bin(12)
```

```
Out[4]: '0b1100'
```

```
In [5]: bin(13)
```

```
Out[5]: '0b1101'
```

```
In [11]: 0b1100
```

```
Out[11]: 12
```

```
In [12]: 0b11000111
```

```
Out[12]: 199
```

```
In [13]: a|b
```

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

```
In [14]: a^b
```

```
Out[14]: 1
```

```
In [15]: a=25  
b=40  
a^b
```

```
Out[15]: 49
```

```
In [16]: bin(40)
```

```
Out[16]: '0b101000'
```

```
In [17]: a&b
```

```
Out[17]: 8
```

```
In [18]: a|b
```

```
Out[18]: 57
```

LEFT SHIFT

```
In [19]: a=12  
12<<1
```

```
Out[19]: 24
```

```
In [20]: a=25  
a<<2
```

```
Out[20]: 100
```

RIGHT SHIFT

In [21]: a>>2

Out[21]: 6

In []:

In []: