

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 []:

In []:

In []:

In []:

In []:

In []: