

# 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]:  $\sim 1$

Out[22]: -2

In [23]:  $\sim 8$

Out[23]: -9

In [24]:  $\sim 78$

Out[24]: -79

In [ ]: