



# Python Comparison Operators

If you have any sort of background in Math, these operators should be very straight forward.

First we'll present a table of the comparison operators and then work through some examples:

## Table of Comparison Operators

In the table below,  $a=3$  and  $b=4$ .

Operator	Description	Example
<code>==</code>	If the values of two operands are equal, then the condition becomes true.	$(a == b)$ is not true.
<code>!=</code>	If values of two operands are not equal, then condition becomes true.	$(a != b)$ is true
<code>&gt;</code>	If the value of left operand is greater than the value of right operand, then condition becomes true.	$(a > b)$ is not true.
<code>&lt;</code>	If the value of left operand is less than the value of right operand, then condition becomes true.	$(a < b)$ is true.
<code>&gt;=</code>	If the value of left operand is greater than or equal to the value of right operand, then condition becomes true.	$(a >= b)$ is not true.
<code>&lt;=</code>	If the value of left operand is less than or equal to the value of right operand, then condition becomes true.	$(a <= b)$ is true.

Let's now work through quick examples of each of these.

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In [69]: `2 == 1`

Out[69]: False

In [70]: `'hello' == 'bye'`

Out[70]: False

In [ ]:

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```
In [71]: 'Bye' == 'bye'
```

```
Out[71]: False
```

```
In [72]: '2' == 2
```

```
Out[72]: False
```

```
In [ ]: |
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In [73]: `2.0 == 2`

Out[73]: True

In [74]: `3 != 3`

Out[74]: False

In [ ]: |

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In [75]: `4 != 5`

Out[75]: True

In [76]: `2 > 1`

Out[76]: True

In [ ]: `1 >`

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In [77]: `1 > 2`

Out[77]: False

In [78]: `1 < 2`

Out[78]: True

In [ ]: `2 <`

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In [80]: `2 >= 2`

Out[80]: True

In [81]: `4 <= 1`

Out[81]: False

In [ ]:

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