



Comparison Operators & Boolean Expressions

Comparison operators

Comparison Operators	Meaning
>	Greater than
<	Less than
>=	Greater than or equal to
<=	Less than or equal to
==	Equality
!=	Inequality

Comparison operators are used to compare two operands

Be careful not to confuse the **assignment** operator (=) with the **equality** operator (==)

Comparison operators only look at the values of the variables and do not modify them

Comparison operators and Boolean expressions

Comparison Operators	Boolean Expression	Meaning
>	$X > Y$	X is greater than Y
<	$X < Y$	X is less than Y
>=	$X \geq Y$	X is greater than or equal to Y
<=	$X \leq Y$	X is less than or equal to Y
==	$X == Y$	X is equal to Y
!=	$X != Y$	X is not equal to Y

Comparison expressions are **Boolean**

That means they evaluate to either **True** or **False**

Comparison operators and Boolean expressions

$X = 3$

$Y = 2$

$X > Y$ returns True

$X < Y$ returns False

Comparison operators are mainly used to control program flow

```
2 Python-Comparison-Operators
3 """
4 X = 100
5 Y = 200
6
7 print(X != Y) ..... # X is not equal to Y
8 print(X > Y) ..... # X is greater than Y
9 print(X < Y) ..... # X is less than Y
10 print(X >= Y) ..... # X is greater than or equal to Y
11 print(X <= Y) ..... # X is less than or equal to Y
12
```

TERMINAL OUTPUT PROBLEMS DEBUG CONSOLE

1: bash

minae@PSYCHE MINGW64 ~/Desktop/NucampFolder/Python/1 - Fundamentals

\$ python comparison_operators.py

True

False

True

False

True