**Commonly used operators**

There are several other commonly used operators in Python, including:

* **Arithmetic operators:** These are used for arithmetic operations (addition, subtraction, multiplication, etc.).
* **Comparison operators:** These are used in conditional expressions (less than, greater than, etc.) .
* **Logical operators:** These are used to combine conditional expressions (and, or, not).
* **Compound assignment operators:** These are the combinations of arithmetic and assignment operators.

**Arithmetic Operators**

|  |  |  |  |
| --- | --- | --- | --- |
| Operator | Description | Syntax | Results  x=7 and y=4 |
| + | Addition: Adds two operands | x + y | 11 |
| - | Subtraction: Subtracts two operands | x - y | 3 |
| \* | Multiplication: Multiplies two operands | x \* y | 28 |
| / | Non-integer division: Divides the first operand by the second and returns a floating point quotient | x / y | 1.75 |
| // | Integer division: Divides the first operand by the second,and forces the result to be an integer | x // y | 1 |
| % | Modulo: Returns the remainder when the first operand is divided by the second | x % y | 3 |
| \*\* | Power: Returns the first number raised to power of the second number. | x \*\* y | 2401 |

**Comparison Operators**

|  |  |  |  |
| --- | --- | --- | --- |
| Operator | Description | Syntax | Results  x=7 and y=4 |
| > | Greater than: True if the left operand is greater than the right | x > y | True |
| < | Less than: True if the left operand is less than the right | x < y | False |
| == | Equal to: True if both operands are equal | x == y | False |
| != | Not equal to: True if both operands are not equal | x != y | True |
| >= | Greater than or equal to: True if the left operand is greater than or equal to the right | x >= y | True |
| <= | Less than or equal to: True if the left operand is less than or equal to the right | x <= y | False |

**Logical Operators**

|  |  |  |  |
| --- | --- | --- | --- |
| Operator | Description | Syntax | Results  x=7 and y=4 |
| and | Logical AND: True if both the operands are true | x > 4 and y > 4 | False |
| or | Logical OR: True if either of the operands is true | x > 4 or y > 4 | True |
| not | Logical NOT: True if the operand is false | not x > 4 | False |

**Compound Assignment Operators**

|  |  |  |  |
| --- | --- | --- | --- |
| Operator | Description | Syntax | Results  x=7 and y=4 |
| += | Add and assign: Add the right-side operand with the left-side operand, and assign the result to the left operand (x = x + y) | x += y | x = 11 |
| -= | Subtract and assign: Subtract the right-side operand from the left-side operand and assign the result to the left operand (x = x - y) | x -= y | x = 3 |
| \*= | Multiply and assign: Multiply the right-side operand with the left side operand and assign the result to the left operand (x = x \* y) | x \*= y | x = 28 |
| /= | Divide and assign: Divide the left operand with the right operand, and then assign it to the left operand (x = x / y) | x /= y | x = 1.75 |
| //= | Integer divide and assign: Divide the left operand and the right operand, and assign the integer value (floor of the result) to the left operand (x = x // y) | x //= y | x = 1 |
| %= | Modulo and assign: Take modulo after dividing the left operand with the right operand, and assign the result to the left operand (x = x % y) | x %= y | x = 3 |
| \*\*= | Exponent and assign: Calculate the exponent (raised power) value using operands and assign the value to the left operand (x = x \*\* y) | x \*\*= y | x = 2401 |