



ARITHMETIC OPERATORS

PYTHON BASICS

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TOPIC OUTLINE

Addition

Subtraction

Multiplication

Division

Modulo

Increment

Decrement



ARITHMETIC OPERATORS



ARITHMETIC OPERATORS

Arithmetic operators are used to perform basic mathematical operations on numeric values.

These operators are fundamental to performing calculations and manipulating data in programs.

Unary Operators operates with a single operand (e.g., ++, --).

Binary Operators operates with two operands (e.g., +, -, *, %).



ADDITION

Example:

`a = 5`

`b = 3`

`a + b`

`# output = 8`

The addition (+) operator **adds** two operands.



SUBTRACTION

Example:

`a = 10`

`b = 4`

`a - b`

`# output = 6`

The subtraction (-) operator subtracts the second operand from the first.



MULTIPLICATION

The multiplication (*) operator multiplies two operands.

Example:

`a = 7`

`b = 6`

`a * b`

`# output = 42`



DIVISION

Example:

`a = 10`

`b = 3`

`a / b`

`# output = 3.333`

The division `//` operator **divides** the first operand by the second.



FLOOR DIVISION

For positive numbers, floor division (//) behaves like normal division but discards the fractional part.

For negative numbers, floor division rounds toward negative infinity.

Example:

`a = 10`

`b = 3`

`a / b`

`# output = 3`

`a = 10`

`b = -3`

`a / b`

`# output = -4`



MODULO

The modulo (%) operator returns the **remainder** of the division of the first operand by the second.

Example:

```
a = 10;
```

```
b = 3;
```

```
a % b;
```

```
# output = 1
```



INCREMENT

Example:

x = 5

x++

x = 6

The increment (++) operator increases the value of a variable by 1.



DECREMENT

Example:

x = 5

x--

x = 4

The decrement -- operator decreases the value of a variable by 1.



LABORATORY

