

# Operators in Go

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An **operator** is a symbol of the programming language which is able to **operate on values**.

In Go language, operators can be categorized based upon their different functionality in these categories:

- **Arithmetic and Bitwise Operators:** `+, -, *, /, %, &, |, ^, <<, >>`
- **Assignment Operators:** `+=, -=, *=, /=, %=`
- **Increment and Decrement Statements:** `++, --`
- **Comparison Operators:** `==, !=, <, >, <=, >=`
- **Logical Operators:** `&&, ||, !`
- **Operators for Pointers (&) and Channels (<-)**

# Arithmetic Operators

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**Arithmetic operators** apply to numeric values and are used to perform common mathematical operations.

**There are the following arithmetic operators:**

**+** (addition)

**-** (subtraction)

**\*** (multiplication)

**/** (division)

**%** (modulus or simply mod)

# Assignment Operators

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**Assignment Operators** which are used to assign values to variables.

**There are the following assignment operators:**

= (simple assignment)

+= (increment assignment)

-= (decrement assignment)

\*= (multiplication assignment)

/= (division assignment)

%= (modulus assignment)

- The "++" and "--" **statements** increment or decrement their operands by the untyped constant 1.