

# Operators in Python

In Python, operators are special symbols or keywords that perform operations on values or variables.

They allow us to carry out arithmetic calculations, compare values, assign data, and perform logical tasks.

Types of Operators in Python:

## 1. Arithmetic Operators:

These are used to perform mathematical calculations such as addition, subtraction, multiplication, etc.

Examples: +, -, \*, /, %, \*\*, //

## 2. Relational (Comparison) Operators:

They are used to compare two values and return True or False.

Examples: ==, !=, >, <, >=, <=

## 3. Assignment Operators:

These are used to assign values to variables.

Examples: =, +=, -=, \*=, /=, %=, \*\*=, //=

## 4. Logical Operators:

They are used to combine conditional statements.

Examples: and, or, not

## 5. Bitwise Operators:

These work on binary numbers at the bit level.

Examples: &, |, ^, ~, <<, >>

## 6. Membership Operators:

They check whether a value is a member of a sequence like list, tuple, or string.

Examples: in, not in

## 7. Identity Operators:

They check if two variables refer to the same object in memory.

Examples: is, is not

Summary:

Operators in Python act as tools to manipulate data. Understanding them is essential for writing efficient and logical programs.