



In Python, operators are special symbols or keywords that are used to perform operations on variables and values. Here's a list of some common operators in Python:

1. **Arithmetic Operators:**

- Addition (+)
- Subtraction (-)
- Multiplication (*)
- Division (/)
- Floor Division (//) - Returns the integer part of the quotient
- Modulus (%) - Returns the remainder of the division
- Exponentiation (**) - Raises a number to a power

2. **Comparison (Relational) Operators:**

- Equal to (==)
- Not equal to (!=)
- Greater than (>)
- Less than (<)
- Greater than or equal to (>=)
- Less than or equal to (<=)

3. **Logical Operators:**

- Logical AND (and)
- Logical OR (or)
- Logical NOT (not)

4. **Assignment Operators:**

- Assign (=)
- Add and assign (+=)
- Subtract and assign (-=)
- Multiply and assign (*=)
- Divide and assign (/=)
- Modulus and assign (%=)
- Exponentiate and assign (**=)
- Floor divide and assign (//=)

5. **Identity Operators:**



- is - Returns true if both variables are the same object
- is not - Returns true if both variables are not the same object

6. Membership Operators:

- in - Returns true if a sequence with the specified value is present in the object
- not in - Returns true if a sequence with the specified value is not present in the object

7. Bitwise Operators:

- Bitwise AND (&)
- Bitwise OR (|)
- Bitwise XOR (^)
- Bitwise NOT (~)
- Left Shift (<<)
- Right Shift (>>)

These operators can be used in combination with variables, values, and expressions to perform various operations like arithmetic calculations, comparisons, logical operations, etc.

Code:

```
# Arithmetic operators:
a = 10
b = 5

# Addition
print(a + b) # Output: 15

# Subtraction
print(a - b) # Output: 5

# Multiplication
print(a * b) # Output: 50

# Division
print(a / b) # Output: 2.0

# Modulus (remainder)
```



```
print(a % b)  # Output: 0

# Exponentiation
print(a ** b)  # Output: 100000

# Comparison Operators:

a = 10
b = 5

# Equal to
print(a == b)  # Output: False

# Not equal to
print(a != b)  # Output: True

# Greater than
print(a > b)  # Output: True

# Less than
print(a < b)  # Output: False

# Greater than or equal to
print(a >= b)  # Output: True

# Less than or equal to
print(a <= b)  # Output: False

# Logical Operators:

x = True
y = False

# Logical AND
print(x and y)  # Output: False

# Logical OR
print(x or y)  # Output: True

# Logical NOT
print(not x)  # Output: False

# Assignment Operators:
```



```
a = 10

# Assign
b = a
print(b)  # Output: 10

# Add and assign
a += 5
print(a)  # Output: 15

# Subtract and assign
a -= 3
print(a)  # Output: 12

# Multiply and assign
a *= 2
print(a)  # Output: 24

# Divide and assign
a /= 4
print(a)  # Output: 6.0

# Membership Operators:

my_list = [1, 2, 3, 4, 5]

# In
print(3 in my_list)  # Output: True

# Not in
print(6 not in my_list)  # Output: True
```



Output:

```
C:\Users\test\PycharmProjects\project_1\.venv\Scripts\python.exe C:\Users\test\PycharmProjects\project_1\Project_1.py
15
5
50
2.0
0
100000
False
True
True
False
True
False
False
True
False
10

15
12
24
6.0
True
True
```