

C5 Operators

Arithmetic operators

- addition (+)
- subtraction (-)
- multiplication (*)
- division (/)
- integer division (//)
- remainder/ modulo (%)
- exponent (**)
- unary negative (-)
- unary positive (+)

Bitwise operator

- operate on bits only
- and (&)
- or (|)
- Xor (^)
- shift left (<<)
 - shift the bit to the left side
- shift right (>>)
 - shift the bit to the right side

```
x = 0x0a
y = 0x02
z = x & y

print(f'(hex) x is {x:02x}, y is {y:02x}, z is {z:02x}')
print(f'(bin) x is {x:08b}, y is {y:08b}, z is {z:08b}')
```

Comparison operators

- less than (<)
- greater than (>)
- less than or equal (<=)
- greater than or equal (>=)
- equal (==)
- not equal (!=)

Boolean operators

- and
- or
- not
- in
- not in
- is
- is not

Operator precedence

Operator	Description
**	Exponent
+x, -x	Positive, negative
*, /, //, %	Multiplication, division, remainder
+, -	Addition and subtraction
<<, >>	Bitwise shifts
&	Bitwise AND
^	Bitwise XOR
	Bitwise OR
in, not in, is, is not, <, <=, >, >=, !=, ==	Comparisons, including membership tests and identity tests
not x	Boolean NOT
and	Boolean AND
or	Boolean OR