

Day-4 4/11/25

* Operators (7 types of operators)

• are special symbols or keyboard that perform operation on values

Ex: $a + b$

(+) - operator

a, b - operands.

1. Arithmetic operators:

Used for numeric calculation

+, Addition $a + b$

-, Subtraction $a - b$

*, Multiplication $a * b$

/, Division a / b

//, Floor Division $a // b$ (It gives rounded value)

%, modulus $a \% b$ (It gives remainder)

** Exponentiation $a ** b \rightarrow a^b$

2. Comparison (Relational) operators (Returns Boolean values)

$=$, $!=$, $>$, $<$, $>=$, $<=$

3. Logical operators

Used for Boolean logic

1. And

2. Or

3. Not not

4) Bitwise operators

operate on binary values

& - bitwise And

| - bitwise Or

^ - Bitwise XOR

~ - Bitwise Not

<< Left Shift

>> Right Shift

5) Assignment operators

Assign and optionally modify values

= assignment

$a = b$

+= Add + assign

$a += 3$

-= Sub + assign

$a -= 3$

*= mul + assign

$a *= 3$

/=

%=

*>=

<=, >=, <<=, >>=

6. membership operators

checks presence in sequence (or) collection

1. in

Present

'a' in text

2. not in

not Present

'x' not in data

7. Identity operators

Check object identity (memory address)

is

Same object

a is b

is not

Different object

a is not b