

1. Arithmetic Operators

Used for mathematical calculations.

```
+   Addition      -> 5 + 2 = 7
-   Subtraction   -> 5 - 2 = 3
*   Multiplication -> 5 * 2 = 10
/   Division      -> 5 / 2 = 2.5
%   Modulus       -> 5 % 2 = 1
**  Exponentiation -> 2 ** 3 = 8
```

2. Assignment Operators

Used to assign values to variables.

```
=    x = 10
+=   x += 5    -> x = x + 5
-=   x -= 3    -> x = x - 3
*=   x *= 2    -> x = x * 2
/=   x /= 4    -> x = x / 4
%=   x %= 3    -> x = x % 3
**=  x **= 2   -> x = x ** 2
```

3. Comparison Operators

Used to compare two values.

```
==    Equal (value only)      -> 5 == '5' -> true
===   Strict Equal (value & type) -> 5 === '5' -> false
!=    Not Equal (value)       -> 5 != '5' -> false
!==   Strict Not Equal        -> 5 !== '5' -> true
>     Greater Than            -> 10 > 5 -> true
<     Less Than               -> 2 < 5 -> true
>=    Greater Than or Equal    -> 5 >= 5 -> true
<=    Less Than or Equal      -> 4 <= 5 -> true
```

4. Logical Operators

Used to combine multiple boolean expressions.

```
&&   Logical AND -> true && false = false
||   Logical OR  -> true || false = true
!    Logical NOT -> !true = false
```