

OPERATORS



ARITHMETIC OPERATORS

- + (Addition)
- - (Subtraction)
- * (Multiplication)
- / (Division)
- % (Modulus - returns the remainder of a division)
- ++ Increment Operator
- -- Decrement Operator

```
● ● ●  
Addition: 15  
Subtractoin: 5  
Multiplication: 50  
Division: 2  
Modulus: 0  
Increment: 10  
Decrement: 5  
11  
4
```

```
● ● ●  
let a = 10;  
let b = 5;  
console.log("Addition: "+(a + b)); // 15  
console.log("Subtractoin: "+a - b); // 5  
console.log("Multiplication: "+a * b); // 50  
console.log("Division: "+a / b); // 2  
console.log("Modulus: "+a % b); // 0  
console.log("Increment: "+(a++)); // 2  
console.log("Decrement: "+(b--)); // 0  
console.log(a)  
console.log(b)
```

ASSIGNMENT OPERATORS

Name	Description	Syntax
Assignment (<code>=</code>)	This operator assigns the right operand value to the left operand.	If $A = 10$ and $Y = A$ then $Y = 10$
Addition Assignment (<code>+=</code>)	Sums up left and right operand values and then assigns the result to the left operand.	$Y += 1$ gives $Y = Y + 1$
Subtraction Assignment (<code>-=</code>)	It subtracts the right side value from the left side value and then assigns the result to the left operand.	$Y -= 1$ gives $Y = Y - 1$
Multiplication Assignment (<code>*=</code>)	It multiplies a variable by the value of the right operand and assigns the result to the variable.	$Y *= A$ is equivalent to $Y = Y * A$
Division Assignment (<code>/=</code>)	It divides a variable by the value of the right operand and assigns the result to the variable.	$Y /= A$ is equivalent to $Y = Y / A$
Modules/Remainder Assignment (<code>%=</code>)	It divides a variable by the value of the right operand and assigns the remainder to the variable.	$Y %= A$ is equivalent to $Y = Y \% A$
Exponentiation Assignment (<code>**=</code>)	This raises the value of a variable to the power of the right operand.	$Y **= A$ is equivalent to $Y = Y ** A$

COMPARISION OPERATORS

Name	Description	Syntax
Equality (==)	Compares the equality of two operands. If equal then the condition is true otherwise false.	$Y = 5 \text{ and } X = 6 \quad Y == X \text{ is false.}$
Strict equality (===)	Compares the equality of two operands with type. If both value and type are equal then the condition is true otherwise false.	$Y = 5 \text{ and } X = '5' \quad Y === X \text{ is false.}$
Inequality (!=)	Compares inequality of two operands. True if operands are not equal.	$\text{let } X = 10 \text{ then } X != 11 \text{ is true.}$
Strict inequality(!==)	Compares the inequality of two operands with type. If both value and type are equal then the condition is true otherwise false.	$\text{let } X = 10 \text{ then } X != '10' \text{ is true.}$
Greater than (>)	This operator checks whether the left side value is greater than the right side value. If yes then it returns true otherwise it returns false.	$\text{let } X = 10 \text{ then } X > 11 \text{ is false.}$
Less than (<)	This operator checks whether the left side value is less than the right side value. If yes then it returns true otherwise it returns false.	$\text{let } X = 10 \text{ then } X < 11 \text{ is true.}$
Greater than or Equal to (>=)	This operator checks whether the left side operand is greater than or equal to the right side operand. If yes then it returns true otherwise it returns false.	$\text{let } X = 10 \text{ then } X >= 11 \text{ is false.}$
Less than or Equal to (<=)	This operator checks whether the left side operand value is less than or equal to the right side operand value. If yes then it returns true otherwise it returns false.	$\text{let } X = 10 \text{ then } X <= 10 \text{ is true.}$