

Operators

// Arithmetic operators

/*

+ addition x+y

- subtraction x-y

* multiplication x*y

/ division x/y

% modulus x%y

++ increment ++x

-- decrement --x

Assignment operator

= assign x=5

+= add and assign x+=3

-= subtract and assign x-=3

= multiply & assign x=3

/= divide & assign x/=3

%= modulus & assign x%=3

Comparison Operator

== Equal to x==y

=== checks var type with no

!= Not equal x!=y

> greater than x>y

< less than x= greater than equal x>=y

<= less than equal x<=y

Logical Operator

&& and if both T T =T IF T F =F x < 5 && x <10

|| or if one True and is True x <5 || x < 4

! not reverse result t->f f->t !(x<5 && x<10)

x + y = z

[x & y are operands] [+ = are operators] [z] --> result

Examples

1)

```
var a =10;
```

```
a*=6;
```

```
// a=a-6
```

```
console.log(" :assign +=",a);
```

output 60

2)

```
var p = 10;
```

```
var q = 20;
```

```
var result = !(p<5 && q<10);
```

```
console.log(result);
```

output true

3) == and ===

== is called the loose equality operator. It accepts type coercion means one is number other is string

```
var num1=10;
```

```
var num2="10";
```

```
console.log(a==b);
```

output true

=== is the strict equality operator. It does not accept coercion

```
var num1=10;  
var num2="10";
```

```
console.log(a===b);  
output false
```

```
console.log(5 < 10);    // true less than  
console.log(7 > 20);    // false greater than  
console.log(3 <= 3);    // true less than equal  
console.log(4 >= 5);    // false greater than equal
```

AND T T->T, T F->F

```
console.log(true && true);    // true  
console.log(true && false);   // false
```

OR T F->T , T T->T , F F->F

```
console.log(true || false);   // true  
console.log(false || false);  // false
```

NOT (!) Reverse the result

```
console.log(!true);           // false  
console.log(!false);          // true
```

Conditional statement

if else if else

example:

```
let age = 18;
```

```
if (age < 13) {  
    console.log("You're a child.");  
} else if (age < 20) {  
    console.log("You're a teenager.");  
} else {
```

```
    console.log("You're an adult.");  
}
```

output You're a teenager.

Dialog Boxes in Javascript

3types of dialog boxes

// 1 alert ok button

```
// console.log(alert("hello how r u"));
```

// 2 confirm ok and cancel

```
// console.log(confirm("r u sure u want to delete"));
```

```
// console.log(confirm('are u want to exit?'));
```

// 3 prompt it takes input from users

```
// console.log(prompt('enter ur no'));
```

<script>

```
    // input user for age
```

```
    let age = prompt("Please enter your age:");
```

```
    // Convert the input to a number, as prompt returns a string
```

```
    age = parseInt(age);
```

```
    if (age < 18) {
```

```
        alert("You are not eligible to vote.");
```

```
    } else if (age > 50) {
```

```
        alert("Age limit exceeded.");
```

```
    } else {
```

```
        alert("You are eligible to vote.");
```

```
    }
```

</script>