Comparison Operators

Remember booleans values? Booleans are either true or false.

We can compare two numbers with >, >=, ==, ===, <=, <.

(We will discuss the difference between == and === in the next slide.).

For the rest of the operators the result of the comparison is a boolean.

The ! operator:

The ! operator negates its operand. True becomes false, and false becomes true.

```
console.log(5 <= 5); // true

console.log(5 < 5); // false
```

Comparison Operators

The comparison operators take simple values (numbers or strings) as arguments and evaluate them to be either true or false. Here is a list of comparison operators.

Operator	Comparison	Description
Equal (==)	x == y	Returns true if the operands are equal.
Not equal (!=)	x != y	Returns true if the operands are not equal.
Strict equal (===)	x === y	Returns true if the operands are equal and of the same type.
Strict not equal (!==)	x !== y	Returns true if the operands are not equal and/or not of the same type
Greater than (>)	x > y	Returns true if the left operand is greater than the right operand..
Greater than or equal (>=)	x >= y	Returns true if the left operand is greater than or equal to the right operand
Less than (<)	x < y	Returns true if the left operand is less than the right operand

Operator	Comparison	Description
Less than or equal (<=)	x <= y	Returns true if the left operand is less than or equal to the right operand

Comparison Operators

Truthy & Falsy:

Before we continue, let's explore in detail the notions of truthy and falsy.

Truthy: Something which evaluates to TRUE.

Falsy: Something which evaluates to FALSE.

It's mostly logical. One (1) is truthy, Zero (0) is falsy. An object of any kind (including functions, arrays, RegExp objects, etc.) is always truthy. *The easiest way to determine if something is truthy is to determine that it's not falsy.*

There are only six falsy values in JavaScript:

undefined, **null**, **NaN**(Not A Number), **0**, ""(empty string), and **false**

```
console.log(Boolean(undefined));
console.log(Boolean(null));
console.log(Boolean(NaN));
console.log(Boolean(""));
console.log(Boolean(0));
console.log(Boolean(false));
```