

JS Operators

What are Operators?

What are Operators?

In JavaScript, we have comparison operators and logical operators

Comparison operators compare two values (e.g. equal, greater than)

Logical operators are used to make more complex conditionals

- e.g. Deciding based on two different facts (this AND that, this OR that)

Comparison Operators

Comparison Operators

Operator	Meaning	Example
==	Loose equality	4 == "4"
===	Strict equality	4 === 4
!=	Loose inequality	1 != "5"
!==	Strict inequality	8 !== 2
>	Greater than	14 > 10
>=	Greater than or equal to	19 >= 14
<	Less than	10 < 242
<=	Less than or equal to	214 <= 344

== VS. ===

The answer is based on something called **type coercion**

- When you use the threequals sign
 - The values and types must be the same
- When you use the double equals
 - The types will be coerced (if different)
 - The values after coercion must end up similar
 - e.g. `4 == "4"`

== **VS.** ===

So, type coercion is when a data type is converted into a different type

Almost always use ===! Be in charge of converting between types

You need to remember far less, too (e.g. [Strict Equality](#) vs. [Loose Equality](#))

Logical Operators

Logical Operators

Operator	Meaning	Example
&&	AND	3 === 3 && 2 === 2
	OR	4 === 1 4 === 4
!	NOT	!false

&& Truth Table

Condition 1	Condition 2	Result
false	false	false
true	false	false
false	true	false
true	true	true

BOTH sides must be true(ish)

|| Truth Table

Condition 1	Condition 2	Result
false	false	false
true	false	true
false	true	true
true	true	true

One or more sides must be true(ish)

|| Logical Operator

```
var lang = "HTML";

if (lang === "HTML" || lang === "CSS" || lang === "JS") {
  console.log("You are talking about a frontend language");
} else {
  console.log("It is probably a backend language");
}
```

&& Logical Operator

```
var userNameExists = true;
var correctPassword = true;

if (userNameExists === true && correctPassword === true) {
  console.log("You are logged in");
} else {
  console.log("Something went wrong");
}
```

! Logical Operator

```
var hasAccount = false;

if ( !hasAccount ) {
  console.log("You can create an account");
} else {
  console.log("You already have an account");
}
```

In-class Exercise / Homework

Do the exercises found [here](#)