Boolean Values

Very often, in programming, you will need a data type that can only have one of two values, like

- YES / NO
- ON / OFF
- TRUE / FALSE

For this, JavaScript has a Boolean data type. It can only take the values true or false.

Boolean() Function

use the `Boolean()` function to find out if an expression (or a variable) is true

Operator	Description	Example
==	equal to	if (day == "Monday")
>	greater than	if (salary > 9000)
<	less than	if (age < 18)

Comparison Operators

Comparison operators are used in logical statements to determine equality or difference between variables or values.

Given that `x = 5`, the table below explains the comparison operators:

Operator	Description	Comparing	Returns
==	equal to	x == 8	false
		x == 5	true
		x == "5"	true
===	equal value and equal type	x === 5	true
		x === "5"	false

!=	not equal	x != 8	true
!==	not equal value or not equal type	x !== 5	false
		x !== "5"	true
		x !== 8	true
>	greater than	x > 8	false
<	less than	x < 8	true
>=	greater than or equal to	x >= 8	false
<=	less than or equal to	x <= 8	true

Conditional Statement

Very often when you write code, you want to perform different actions for different decisions.

You can use conditional statements in your code to do this.

In JavaScript we have the following conditional statements:

- ☐ Use `if` to specify a block of code to be executed, if a specified condition is true
- ☐ Use `else` to specify a block of code to be executed, if the same condition is false
- ☐ Use `else if` to specify a new condition to test, if the first condition is false
- ☐ Use `switch` to specify many alternative blocks of code to be executed

Different Kinds of Loops

JavaScript supports different kinds of loops:

- `for` - loops through a block of code a number of times
- `for/in` - loops through the properties of an object
- `for/of` - loops through the values of an iterable object
- `while` - loops through a block of code while a specified condition is true
- `do/while` - also loops through a block of code while a specified condition is true