

JavaScript

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Advanced Operators

All operators take 2 inputs: $a + b$

Two operators only need one input:

- $a++$, add one to a
- $a--$, subtract one from a

Special operator: $a \% b$, get the remainder when a is divided by b (**modulus**)

Forms

Forms can be handled via JavaScript by setting `onsubmit` to a JavaScript function

Form elements can be identified by their **name**, **id**, or **class**.

We will be using `document.getElementById('id')`

Example time!

Example

Make a simple calculator using buttons and JavaScript, it should be able to

- Add 2 numbers
- Subtract a number from another number
- Multiply 2 numbers
- Divide a number by another number

Selection Statements

A selection statement in JavaScript is called a **conditional**

- A conditional is either **TRUE** or **FALSE**

Conditionals take the form of if-then blocks.

- If a condition is true, perform some action

```
if (CONDITION) { javascript statements; }
```

Examples of conditions:

- `a == b`
- `a > b`
- `a < b`
- Etc.

Example

Check for division by zero

Conditional Operators

Equality

- ==
- <=
- >=
- <
- >

Logic

- && - and (only true when both operands are true)
- || - or (true when at least one operand is true)
- ! – not (true when the operand is false)

Example: Radio buttons

Quiz!

Fill in the BLANKs and submit to @homeworkbot

In HTML, JavaScript is used with the 1. BLANK tag. If a JavaScript file is used, the 2. BLANK attribute must be set to the name of the file. The 3. BLANK operator represents the remainder of a division. The 4. BLANK operator adds one to a variable's value. Forms can be handled with JavaScript by setting the 5. BLANK attribute to a JavaScript 6. BLANK. JavaScript conditionals can be either 7. BLANK or 8. BLANK. The 9. BLANK operator tests for equality. Aside from id, HTML elements can also be identified by their 10. BLANK.