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JavaScript Statements

JavaScript Programs

A computer program is a list of "instructions" to be "executed" by a computer.

In a programming language, these programming instructions are called **statements**.

A JavaScript program is a list of programming statements.

In HTML, JavaScript programs are executed by the web browser.

JavaScript Statements

JavaScript statements are composed of:

Values, Operators, Expressions, Keywords, and Comments.

This statement tells the browser to write "Hello Dolly." inside an HTML element with id="demo":

```
Example

document.getElementById("demo").innerHTML = "Hello Dolly.";

Try it Yourself »
```

Most JavaScript programs contain many JavaScript statements.

The statements are executed, one by one, in the same order as they are written.

JavaScript programs (and JavaScript statements) are often called JavaScript code.

Semicolons;

Semicolons separate JavaScript statements.

Add a semicolon at the end of each executable statement:

```
var a, b, c;  // Declare 3 variables
a = 5;  // Assign the value 5 to a
b = 6;  // Assign the value 6 to b
c = a + b;  // Assign the sum of a and b to c

Try it Yourself »
```

When separated by semicolons, multiple statements on one line are allowed:

```
a = 5; b = 6; c = a + b;
```

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```
Try it Yourself »
```

On the web, you might see examples without semicolons. Ending statements with semicolon is not required, but highly recommended.

JavaScript White Space

JavaScript ignores multiple spaces. You can add white space to your script to make it more readable.

The following lines are equivalent:

```
var person = "Hege";
var person="Hege";
```

A good practice is to put spaces around operators (= + - * /):

```
var x = y + z;
```

JavaScript Line Length and Line Breaks

For best readability, programmers often like to avoid code lines longer than 80 characters.

If a JavaScript statement does not fit on one line, the best place to break it is after an operator:

```
Example

document.getElementById("demo").innerHTML =

"Hello Dolly!";

Try it Yourself »
```

JavaScript Code Blocks

JavaScript statements can be grouped together in code blocks, inside curly brackets {...}.

The purpose of code blocks is to define statements to be executed together.

One place you will find statements grouped together in blocks, is in JavaScript functions:

```
function myFunction() {
  document.getElementById("demo1").innerHTML = "Hello Dolly!";
  document.getElementById("demo2").innerHTML = "How are you?";
}
Try it Yourself »
```

In this tutorial we use 2 spaces of indentation for code blocks. You will learn more about functions later in this tutorial.

JavaScript Keywords

JavaScript statements often start with a keyword to identify the JavaScript action to be performed.

Visit our Reserved Words reference to view a full list of <u>JavaScript keywords</u>.

Here is a list of some of the keywords you will learn about in this tutorial:

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Keyword	Description
break	Terminates a switch or a loop
continue	Jumps out of a loop and starts at the top
debugger	Stops the execution of JavaScript, and calls (if available) the debugging function
do while	Executes a block of statements, and repeats the block, while a condition is true
for	Marks a block of statements to be executed, as long as a condition is true
function	Declares a function
if else	Marks a block of statements to be executed, depending on a condition
return	Exits a function
switch	Marks a block of statements to be executed, depending on different cases
try catch	Implements error handling to a block of statements
var	Declares a variable

JavaScript keywords are reserved words. Reserved words cannot be used as names for variables.