

## What is java script?

JavaScript is a scripting language that enables you to create dynamically updating content, control multimedia, animate images, and pretty much everything else.

## Variables

In JavaScript, variables are used to store and manage data. They are created using the var, let, or const keyword.

### Global Variable

Global variables are those defined outside of any function, making them accessible from anywhere within the script. Regardless of the keyword used for declaration, they all behave similarly and possess a global scope. Even variables declared without a keyword inside a function are considered global.

### Local Variable

When you use JavaScript, local variables are defined within functions in JavaScript. They are confined to the scope of the function that defines them and cannot be accessed from outside. Attempting to access local variables outside their defining function results in an error.

## How to use variables

The scope of a variable or function determines what code has access to it.

Variables that are created inside a function are local variables, and local variables can only be referred to by the code within the function.

Variables created outside of functions are global variables, and the code in all functions has access to all global variables.

If you forget to code the var keyword in a variable declaration, the JavaScript engine assumes that the variable is global. This can cause debugging problems.

In general, it's better to pass local variables from one function to another as parameters than it is to use global variables. That will make your code easier to understand with less chance of errors.

## datatypes:

Data types represent the different kinds of values we can use in JavaScript.

**Primitive Data Types:** They can hold a single simple value. String, Number, BigInt, Boolean, undefined, null, and Symbol are primitive data types.

**Non-Primitive Data Types:** They can hold multiple values. Objects are non-primitive data types.

## JavaScript Operator Types

Here is a list of different JavaScript operators you will learn in this tutorial:

Arithmetic Operators

Assignment Operators

Comparison Operators

Logical Operators

Bitwise Operators

String Operators

Miscellaneous Operators

## JavaScript Arithmetic Operators

We use arithmetic operators to perform arithmetic calculations like addition, subtraction, etc.

## JavaScript Assignment Operators

We use assignment operators to assign values to variables.

## JavaScript Comparison Operators

We use comparison operators to compare two values and return a boolean value (true or false).

## JavaScript Logical Operators

We use logical operators to perform logical operations on boolean expressions.