# W3Schools

## Javascript

### JS Tutorial

#### JS HOME

#### JS Introduction

#### JS Where To

#### JS Output

#### JS Statements

#### JS Syntax

#### JS Comments

#### JS Variables

#### JS Let

#### JS Const

#### JS Operators

#### JS Arithmetic

#### JS Assignment

Left and Right Shift Assignment Operator: <<=, >>=

Unsigned Left and Right Shift Assignment Operator: <<<=, >>>=

x <<= y : x = x \* 2^y

x>>= y : x = x / 2^y

#### JS Data Types

Javascript has 8 datatypes: Number, String, BigInt, Boolean, Undefined, Null, Object, Symbol

The Object Datatypes: Object, Array, Date

#### JS Functions

The () operator invokes or call the function. Accessing a function without () returns the function object and not the function result.

#### JS Objects

#### JS Events

Common HTML Events: <https://www.w3schools.com/jsref/dom_obj_event.asp>

#### JS Strings

Escape Character:

The backslash (\) escape character turns special characters into string characters.

#### JS String Methods

Extracting a part of string methods: Return the extracted part in a new string.

slice(start, end):

* Extracting from start position to end position but not included end position.
* If missing end parameter, method will extract from start position to the rest of string.
* if parameter values are negative, it counts from the end of string.

substring(start, end)

* Same as slice() but doesn’t accept negative value. Treating negative values as 0.
* if missing end parameter, extract from start position to the rest of string.

substr(start, length)

* Extracting a part of string from the start and length of part
* if missing length parameter, extract from the start position to the rest of string.
* If the first parameter is negative, count from the end of string.

Replacing String Content: Replace a specified value with another value in a string.

replace(specified string, new string)

* Method doesn’t change the string it is called on
* Method return a new string
* Method only replaces only the first match. To replace all match, use a regular expression with a /g flag.
* Method is case sensitive. To replace case insensitive, use a regular expression with an /I flag.
* Regular expressions are written without quotes.

Javascript String trim(): Remove whitespace from both sides of a string.

Javascript String trimStart(): Remove whitespace only from the start of a string.

Javascript String trimEnd(): Same as trim() but only remove whitespace from the end of string.

#### JS String Search

#### JS String Templates

#### JS Numbers

#### JS BigInt

#### JS Number Methods

#### JS Number Properties

#### JS Arrays

#### JS Array Methods

#### JS Array Sort

#### JS Array Iteration

#### JS Array Const

#### JS Dates

#### JS Date Formats

#### JS Date Get Methods

#### JS Date Set Methods

#### JS Math

#### JS Random

#### JS Booleans

#### JS Comparisons

#### JS If Else

#### JS Switch

#### JS Loop For

#### JS Loop For In

#### JS Loop For Of

#### JS Loop While

#### JS Break

#### JS Iterables

#### JS Sets

#### JS Maps

#### JS Typeof

#### JS Type Conversion

#### JS Bitwise

#### JS RegExp

#### JS Precedence

#### JS Errors

#### JS Scope

#### JS Hoisting

#### JS Strict Mode

#### JS this Keyword

#### JS Arrow Function

#### JS Classes

#### JS Modules

#### JS JSON

#### JS Debugging

#### JS Style Guide

#### JS Best Practices

#### JS Mistakes

#### JS Performance

#### JS Reserved Words

### JS Versions

#### JS Versions

#### JS 2009 (ES5)

#### JS 2015 (ES6)

#### JS 2016

#### JS 2017

#### JS 2018

#### JS 2019

#### JS 2020

#### JS 2021/2022

#### JS IE / Edge

#### JS History

### JS Objects

#### Object Definitions

#### Object Properties

#### Object Methods

#### Object Display

#### Object Accessors

#### Object Constructors

#### Object Prototypes

#### Object Iterables

#### Object Sets

#### Object Maps

#### Object Reference

### JS Functions

#### Function Definitions

#### Function Parameters

#### Function Invocation

#### Function Call

#### Function Apply

#### Function Bind

#### Function Closures

### JS Classes

#### Class Intro

#### Class Inheritance

#### Class Static

### JS Async

#### JS Callbacks

#### JS Asynchronous

#### JS Promises

#### JS Async/Await

### JS HTML DOM

#### DOM Intro

#### DOM Methods

#### DOM Document

#### DOM Elements

#### DOM HTML

#### DOM Forms

#### DOM CSS

#### DOM Animations

#### DOM Events

#### DOM Event Listener

#### DOM Navigation

#### DOM Nodes

#### DOM Collections

#### DOM Node Lists

### JS Browser BOM

#### JS Window

#### JS Screen

#### JS Location

#### JS History

#### JS Navigator

#### JS Popup Alert

#### JS Timing

#### JS Cookies

### JS Web APIs

#### Web API Intro

#### Web Forms API

#### Web History API

#### Web Storage API

#### Web Worker API

#### Web Fetch API

#### Web Geolocation API

### JS AJAX

#### AJAX Intro

#### AJAX XMLHttp

#### AJAX Request

#### AJAX Response

#### AJAX XML File

#### AJAX PHP

#### AJAX ASP

#### AJAX Database

#### AJAX Applications

#### AJAX Examples

### JS JSON

#### JSON Intro

#### JSON Syntax

#### JSON vs XML

#### JSON Data Types

#### JSON Parse

#### JSON Stringify

#### JSON Objects

#### JSON Arrays

#### JSON Server

#### JSON PHP

#### JSON HTML

#### JSON JSONP

### JS vs jQuery

#### jQuery Selectors

#### jQuery HTML

#### jQuery CSS

#### jQuery DOM

### JS Graphics

#### JS Graphics

#### JS Canvas

#### JS Plotly

#### JS Chart.js

#### JS Google Chart

#### JS D3.js

### JS Examples

#### JS Examples

#### JS HTML DOM

#### JS HTML Input

#### JS HTML Objects

#### JS HTML Events

#### JS Browser

#### JS Editor

#### JS Exercises

#### JS Quiz

#### JS Bootcamp

#### JS Certificate

### JS References

#### JavaScript Objects

#### HTML DOM Objects

## CSS

## HTML