var mensagem = "some string";

alert(typeof mensagem); //"string"

alert(typeof 95); //"number"

--

var mensagem;

alert(mensagem == undefined); //true

--

var mensagem = undefined;

alert(mensagem == undefined); //true

--

var mensagem; //this variable is declared but has a value of undefined

//make sure this variable isn't declared

//var age

alert(mensagem); //"undefined"

alert(age); //causes an error

--

var mensagem; //this variable is declared but has a value of undefined

//make sure this variable isn't declared

//var age

alert(typeof mensagem); //"undefined"

alert(typeof age); //"undefined"

--

var car = null;

alert(typeof car); //"object"

--

var mensagem = "Hello world!";

var mensagemAsBoolean = Boolean(mensagem);

alert(mensagemAsBoolean); //true

--

var mensagem = "Hello world!";

if (mensagem){

alert("Value is true");

}

--

alert(0.1 + 0.2);

--

var result = Number.MAX\_VALUE + 1;

alert(isFinite(result)); // false

--

alert(NaN == NaN); //false

alert(isNaN(NaN)); //true

alert(isNaN(10)); //false – 10 is a number

alert(isNaN("10")); //false – can be converted to number 10

alert(isNaN("blue")); //true – cannot be converted to a number

alert(isNaN(true)); //false – can be converted to number 1

--

var num1 = Number("Hello world!"); //NaN

var num2 = Number(""); //0

var num3 = Number("000011"); //11

var num4 = Number(true); //1

alert(num1);

alert(num2);

alert(num3);

alert(num4);

--

var num1 = parseInt("1234blue"); //1234

var num2 = parseInt(""); //NaN

var num3 = parseInt("0xA"); //10 - hexadecimal

var num4 = parseInt(22.5); //22

var num5 = parseInt("70"); //70 - decimal

var num6 = parseInt("0xf"); //15 – hexadecimal

alert(num1);

alert(num2);

alert(num3);

alert(num4);

alert(num5);

alert(num6);

--

var num1 = parseInt("AF", 16); //175

var num2 = parseInt("AF"); //NaN

alert(num1);

alert(num2);

--

var num1 = parseInt("10", 2); //2 – parsed as binary

var num2 = parseInt("10", 8); //8 – parsed as octal

var num3 = parseInt("10", 10); //10 – parsed as decimal

var num4 = parseInt("10", 16); //16 – parsed as hexadecimal

alert(num1);

alert(num2);

alert(num3);

alert(num4);

--

var num1 = parseFloat("1234blue"); //1234 - integer

var num2 = parseFloat("0xA"); //0

var num3 = parseFloat("22.5"); //22.5

var num4 = parseFloat("22.34.5"); //22.34

var num5 = parseFloat("0908.5"); //908.5

var num6 = parseFloat("3.125e7"); //31250000

alert(num1);

alert(num2);

alert(num3);

alert(num4);

alert(num5);

alert(num6);

--

var age = 11;

var ageAsString = age.toString(); //the string "11"

var found = true;

var foundAsString = found.toString(); //the string "true"

alert(ageAsString);

alert(typeof ageAsString);

alert(foundAsString);

alert(typeof foundAsString);

--

var num = 10;

alert(num.toString()); //"10"

alert(num.toString(2)); //"1010"

alert(num.toString(8)); //"12"

alert(num.toString(10)); //"10"

alert(num.toString(16)); //"a"

--

var value1 = 10;

var value2 = true;

var value3 = null;

var value4;

alert(String(value1)); //"10"

alert(String(value2)); //"true"

alert(String(value3)); //"null"

alert(String(value4)); //"undefined"

--

var age = 29;

var anotherAge = --age + 2;

alert(age); //outputs 28

alert(anotherAge); //outputs 30

--

var num1 = 2;

var num2 = 20;

var num3 = --num1 + num2; //equals 21

var num4 = num1 + num2; //equals 21

alert(num3);

alert(num4);

--

var num1 = 2;

var num2 = 20;

var num3 = num1-- + num2; //equals 22

var num4 = num1 + num2; //equals 21

alert(num3);

alert(num4);

--

var s1 = "2";

var s2 = "z";

var b = false;

var f = 1.1;

var o = {

valueOf: function() {

return -1;

}

};

s1++; //value becomes numeric 3

s2++; //value becomes NaN

b++; //value becomes numeric 1

f--; //value becomes 0.10000000000000009

o--; //value becomes numeric –2

alert(s1);

alert(s2);

alert(b);

alert(f);

alert(o);

--

var s1 = "01";

var s2 = "1.1";

var s3 = "z";

var b = false;

var f = 1.1;

var o = {

valueOf: function() {

return -1;

}

};

s1 = +s1; //value becomes numeric 1

s2 = +s2; //value becomes numeric 1.1

s3 = +s3; //value becomes NaN

b = +b; //value becomes numeric 0

f = +f; //no change, still 1.1

o = +o; //value becomes numeric –1

alert(s1);

alert(s2);

alert(s3);

alert(b);

alert(f);

alert(o);

--

var s1 = "01";

var s2 = "1.1";

var s3 = "z";

var b = false;

var f = 1.1;

var o = {

valueOf: function() {

return -1;

}

};

s1 = -s1; //value becomes numeric -1

s2 = -s2; //value becomes numeric -1.1

s3 = -s3; //value becomes NaN

b = -b; //value becomes numeric 0

f = -f; //change to –1.1

o = -o; //value becomes numeric 1

alert(s1);

alert(s2);

alert(s3);

alert(b);

alert(f);

alert(o);

--

alert(!false); //true

alert(!"blue"); //false

alert(!0); //true

alert(!NaN); //true

alert(!""); //true

alert(!12345); //false

--

alert(!!"blue"); //true

alert(!!0); //false

alert(!!NaN); //false

alert(!!""); //false

alert(!!12345); //true

--

var found = true;

var result = (found && someUndeclaredVariable); //error occurs here

alert(result); //this line never executes

--

var found = false;

var result = (found && someUndeclaredVariable); //no error

alert(result); //works

--

var found = true;

var result = (found || someUndeclaredVariable); //no error

alert(result); //works

--

var found = false;

var result = (found || someUndeclaredVariable); //error occurs here

alert(result); //this line never executes

--

var result1 = 5 + 5; // dois numeros

alert(result1); //10

var result2 = 5 + "5"; //um numero e uma string

alert(result2); //"55"

--

var num1 = 5;

var num2 = 10;

var mensagem = "The sum of 5 and 10 is " + num1 + num2;

alert(mensagem); //"The sum of 5 and 10 is 510"

--

var num1 = 5;

var num2 = 10;

var mensagem = "The sum of 5 and 10 is " + (num1 + num2);

alert(mensagem); //"The sum of 5 and 10 is 15"

--

var result1 = 5 - true; //4 because true is converted to 1

var result2 = NaN - 1; //NaN

var result3 = 5 - 3; //2

var result4 = 5 - ""; //5 because "" is converted to 0

var result5 = 5 - "2"; //3 because "2" is converted to 2

var result6 = 5 - null; //5 because null is converted to 0

alert(result1);

alert(result2);

alert(result3);

alert(result4);

alert(result5);

alert(result6);

--

alert(null == undefined); //true

alert(null === undefined); //false

alert("NaN" == NaN); //false

alert("NaN" === NaN); //false

alert(NaN == NaN); //false

alert(NaN === NaN); //false

alert(NaN != NaN); //true

alert(NaN !== NaN); //true

alert(false == 0); //true

alert(false === 0); //false

alert(true == 1); //true

alert(true === 1); //false

alert(null == 0); //false

alert(undefined == 0); //false

alert(5 == "5"); //true

alert(5 === "5"); //false

--

var result1 = ("55" == 55); //true – equal because of conversion

var result2 = ("55" === 55); //false – not equal because different data types

alert(result1);

alert(result2);

--

var result1 = ("55" != 55); //false – equal because of conversion

var result2 = ("55" !== 55); //true – not equal because different data types

alert(result1);

alert(result2);

--

var i = 24;

if (i > 25)

alert("Greater than 25."); //one-line statement

else {

alert("Less than or equal to 25."); //block statement

}

--

var i = 24;

if (i > 25) {

alert("Greater than 25.")

} else if (i < 0) {

alert("Less than 0.");

} else {

alert("Between 0 and 25, inclusive.");

}

--

var i = 0;

do {

i += 2;

} while (i < 10);

alert(i);

--

var i = 0;

while (i < 10) {

i += 2;

}

alert(i);

--

var count = 10;

for (var i=0; i < count; i++){

alert(i);

}

/\* The preceding is the same as:

var count = 10;

var i = 0;

while (i < count){

alert(i);

i++;

}

\*/

--

var count = 10;

var i;

for (i=0; i < count; i++){

alert(i);

}

--

var count = 10;

for (var i=0; i < count; i++){

alert(i);

}

alert(i); //10

--

var count = 10;

var i = 0;

for (; i < count; ){

alert(i);

i++;

}

--

for (var propName in window) {

document.write(propName);

document.write("<br />");

}

--

var num = 0;

for (var i=1; i < 10; i++) {

if (i % 5 == 0) {

break;

}

num++;

}

alert(num); //4

--

var num = 0;

outermost:

for (var i=0; i < 10; i++) {

for (var j=0; j < 10; j++) {

if (i == 5 && j == 5) {

break outermost;

}

num++;

}

}

alert(num); //55

--

var num = 0;

for (var i=1; i < 10; i++) {

if (i % 5 == 0) {

continue;

}

num++;

}

alert(num); //8

--

var num = 0;

outermost:

for (var i=0; i < 10; i++) {

for (var j=0; j < 10; j++) {

if (i == 5 && j == 5) {

continue outermost;

}

num++;

}

}

alert(num); //95

--

with(location){

var qs = search.substring(1);

var hostName = hostname; //unavailable when viewing from a local file

var url = href;

}

alert(qs);

alert(hostName);

alert(url);

--

var i = 25;

switch (i) {

case 25:

alert("25");

break;

case 35:

alert("35");

break;

case 45:

alert("45");

break;

default:

alert("Other");

}

--

var i = 25;

switch (i) {

case 25:

/\* falls through \*/

case 35:

alert("25 or 35");

break;

case 45:

alert("45");

break;

default:

alert("Other");

}

--

switch ("hello world") {

case "hello" + " world":

alert("Greeting was found.");

break;

case "goodbye":

alert("Closing was found.");

break;

default:

alert("Unexpected mensagem was found.");

}

--

var num = 25;

switch (true) {

case num < 0:

alert("Less than 0.");

break;

case num >= 0 && num <= 10:

alert("Between 0 and 10.");

break;

case num > 10 && num <= 20:

alert("Between 10 and 20.");

break;

default:

alert("More than 20.");

}

--

function sayHi(name, mensagem) {

alert("Hello " + name + ", " + mensagem);

}

sayHi("Nicholas", "how are you today?");

--

function sum(num1, num2) {

return num1 + num2;

}

var result = sum(5, 10);

alert(result);

--

function diff(num1, num2) {

if (num1 < num2) {

return num2 - num1;

} else {

return num1 - num2;

}

}

var result = diff(7, 10);

alert(result);

--

function sayHi(name, mensagem) {

return;

alert("Hello " + name + ", " + mensagem); //never called

}

sayHi("Nicholas", "how are you today?");

--

function sayHi() {

alert("Hello " + arguments[0] + ", " + arguments[1]);

}

sayHi("Nicholas", "how are you today?");

--

function howManyArgs() {

alert(arguments.length);

}

howManyArgs("string", 45); //2

howManyArgs(); //0

howManyArgs(12); //1

--

function doAdd() {

if(arguments.length == 1) {

alert(arguments[0] + 10);

} else if (arguments.length == 2) {

alert(arguments[0] + arguments[1]);

}

}

doAdd(10); //20

doAdd(30, 20); //50

--

function doAdd(num1, num2) {

if(arguments.length == 1) {

alert(num1 + 10);

} else if (arguments.length == 2) {

alert(arguments[0] + num2);

}

}

doAdd(10); //20

doAdd(30, 20); //50

--

function doAdd(num1, num2) {

//if(arguments.length == 1) {

arguments[1] = 10;

//}

alert(arguments[0] + num2);

}

doAdd(10, 20); //20

doAdd(30, 20); //50

--

function addSomeNumber(num){

return num + 100;

}

function addSomeNumber(num) {

return num + 200;

}

var result = addSomeNumber(100); //300

alert(result);

--

var result1 = 5 > 3; //true

var result2 = 5 < 3; //false

var result3 = "Brick" < "alphabet"; //true

var result4 = "Brick".toLowerCase() < "alphabet".toLowerCase(); //false

var result5 = "23" < "3"; //true

var result6 = "23" < 3; //false

var result7 = "a" < 3; //false because "a" becomes NaN

var result8 = NaN < 3; //false

var result9 = NaN >= 3; //false

alert(result1);

alert(result2);

alert(result3);

alert(result4);

alert(result5);

alert(result6);

alert(result7);

alert(result8);

alert(result9);

--

alert(5 \* 6); //30

alert(5 \* NaN); //NaN

alert(Infinity \* 0); //NaN

alert(Infinity \* 2); //Infinity

alert("5" \* 5); //25

alert(true \* 10); //10

alert(false \* 10); //0

--

alert(26 % 5); //1

alert(Infinity % 3); //NaN

alert(3 % 0); //NaN

alert(5 % Infinity); //5

alert(0 % 10); //0

alert(true % 25); //1

alert(3 % false); //NaN

--

alert(5 / 5); //1

alert(5 / NaN); //NaN

alert(Infinity / Infinity); //NaN

alert(Infinity / 2); //Infinity

alert(5 / 0); //Infinity

alert(10 / true); //10

alert(10 / false); //Infinity

--

var num1 = 10;

var num2 = 25;

var num3 = (num2 > num1) ? num2 : num1;

alert(num3); //25

--

var num = 5;

alert(num); //5

num += 5;

alert(num); //10

num \*= 2;

alert(num); //20

num /= 10;

alert(num); //2

num -= 2;

alert(num); //0