

<a> (a) tag

creates a link to another web page.

href gives the address of the web page.

target is set to ""_blank"" to show the linked page in a new tab when the user clicks it.

Example code:

```
<a target="_blank" href="http://google.com">Google</a>
<br>
<a href="/m/about.html">
  About Us</a>
```

**
 (br) tag**

puts text on separate lines.

Example code:

```
Name: Super Cutey<br>
Age: 18 months<br>
Weight: 11kg<br>
Height: 62cm
```

!=

means *not equal to*; a != b is true if a and b have different values.

E.g. code >age != 0 is true if age is any value except 0

Example code:

```
alert(8 != 4);
alert(8 != 4 * 2);
alert('CodeAvengers' != 'Code' + 'Avengers');
```

&&

means *AND*; a && b is true if both a **and** b are true.

Example code:

```
alert(5 > 3 && 3 < 4);
alert('a' < 'z' && 'b' < 'a');
```

multiplies numbers

E.g. 4 * 8 equals 32

Example code:

```
alert(8 * 4);

//Do * before + and -
alert(8 * 4 - 2 * 4);
```

+

adds numbers and joins strings

4 + 8 equals 12

'4' + '8', 4 + '8' and '4' + 8 are equal to '48'

Example code:

```
//Add numbers
alert(8 + 4);

//Join strings
alert('8' + '4');
alert('8' + 4);
alert(8 + '4');
```

/

divides numbers

E.g. 16 / 2 equals 8

Example code:

```
alert(16 / 2);

//Do / before + and -
alert(8 + 4 / 2 + 1);
```

==

means *equal to*; a == b is true if a and b have the same value.

E.g. age == 15 is true if age is 15

Example code:

```
alert(8 == 4);
alert(8 == 4 * 2);
alert('CodeAvengers' == 'Code' + 'Avengers');
```

alert(message)

displays a message box with an OK button.

message: the text to display.

Example code:

```
alert('Hello');
```

confirm(message)

displays a message and **returns true** if OK was clicked and **false** for cancel.

message: the text to display.

Example code:

```
var response = confirm('Do you really want to leave?');

if (response == true) {
  alert('Goodbye!');
}
```

for

Example code:

```
var total = 0;

for(var i = 1; i <= 3; i++) {
  var number = prompt('Enter number ' + i);
  total = total + Number(number);
}

alert('The total is ' + total);
```

if

Example code:

```
var age = prompt('How old are you?', '21');

if (age <= 12) {
  alert('You are a child');
} else if (age < 20) {
  alert('You are a teen');
} else if (age < 0 || age > 125) {
  alert('Invalid age');
} else {
  alert('You are an adult');
}
```

isNaN(value)

returns true if a value is an illegal number (not-a-number).

value: the value to be tested.

Example code:

```
console.log( isNaN(10) );
console.log( isNaN('1.07') );
console.log( isNaN('ten') );
console.log( isNaN('10%') );
console.log( isNaN(5 / 0) );
```

NaN

is a special value that is returned when the **Number** function tries to convert a string that is not a number.

Example code:

```
console.log( isNaN(10) );
console.log( isNaN('1.07') );
console.log( isNaN('ten') );
console.log( isNaN('10%') );
console.log( isNaN(5 / 0) );
```

null

is a special value meaning **no value**.

Example code:

```
var name = prompt('What is your name?');

if (name == null) {
  alert('You clicked cancel!');
} else {
  alert('Hello ' + name);
}
```

Number(value)

converts a value to a number; **returns NaN** if the value can't be converted to a number

value: the value to be converted.

Example code:

```
console.log( Number('10') );
console.log( Number('ten') );

console.log( '10' + 10 );
console.log( Number('10') + 10 );
```

Number.toFixed()

formats a number to fixed number of decimal points

The parameter sets the number of digits to appear after the decimal point; this may be a value between 0 and 20 inclusive. If this parameter is omitted, it is treated as 0

Example code:

```
var n = 12345.6789;
n.toFixed();
n.toFixed(1);
n.toFixed(6);

(1.23e+20).toFixed(2);
(1.23e-10).toFixed(2);

2.34.toFixed(1);
-2.34.toFixed(1);
(-2.34).toFixed(1);
```

prompt(question, [defaultAnswer])

asks the user a question

question: the question to ask the user

defaultAnswer(optional): the text shown as the default answer

returns the response as a string, or null if the user clicks cancel

Example code:

```
var name = prompt('What is your name?');

if (name != null) {
  alert('Hello ' + name);
}

//Ask the user's age, convert it to a number and store in a variable
var age = Number(prompt('How old are you?', '21'));
```

while

Example code:

```
var count = 0, total = 0;

while(count < 3) {
  var number = prompt('Enter number ' + count);
  total = total + Number(number);
  count = count + 1;
}

alert('The total is ' + total);
```

||

means *OR*; a || b is true if either a **or** b or both are true.

E.g. age == 5 || age == 10 is true if age is 5 or 10

The | key is normally above the **Enter** key.

Example code:

```
alert(5 < 3 || 4 > 3);
alert('a' > 'z' || 'b' < 'a');
```

<

Less than - a comparative operator: $a < b$ is True if the value of a is less than b .

Example code:

```
print(3 < 4)
print(4 < 3)
```

#Can be used on strings too, alphabetically

```
print("apple" < "banana")
```

>

Greater than - a comparative operator: $a > b$ is True if the value of a is greater than b .

Example code:

```
print(6 > 7)
print(7 > 6)
```

#Can be used on strings too, alphabetically

```
print("apple" > "banana")
```