

 무료 전자 책

배우기

HTML

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# 1: HTML

HTML (H yper T M arkup L anguage) XML " . .

HTML .

1.0	N / A	1994-01-01
2.0	<a href="#">RFC 1866</a>	1995-11-24
3.2	<a href="#">W3C : HTML 3.2</a>	1997-01-14
4.0	<a href="#">W3C : HTML 4.0</a>	1998-04-24
4.01	<a href="#">W3C : HTML 4.01</a>	1999-12-24
5	<a href="#">WHATWG : HTML</a>	2014-10-28
5.1	<a href="#">W3C : HTML 5.1</a>	2016-11-01

## Examples

---

HTML (H yper t M arkup anguage) . HTML . [Cascading Style Sheets \(CSS\)](#) .  
`font` " " [1] .

HTML . HTML .

```
<element_name>...content...</element_name> ( <element_name> ), ( </element_name> )  
<element_name>...content...</element_name>
```

HTML . **void** . `<img>` , `<meta>` , `<link>` `<input>` .

( `: video` , `audio` , `table` , `footer` .

HTML , .

.

```
: video , audio , table , footer
```

```
: <video> , <audio> , <table> , <footer> , </html> , </body>
```

...

<p> .

. ( <p> ) . ( </p> ) ( / ) .

. <p>This is a simple paragraph.</p>

HTML "Hello World" .

HTML . HTML .html .htm [2] .

.

```

<!DOCTYPE html>
<html lang="en">

  <head>
    <meta charset="UTF-8">
    <title>Hello!</title>
  </head>

  <body>
    <h1>Hello World!</h1>
    <p>This is a simple paragraph.</p>
  </body>

</html>

```

.

<!DOCTYPE>	HTML . HTML5. doctypes .
<html>	. ( </html> ) . lang ISO ( en . .
<head>	HTML . . </head> .
<meta>	. charset . HTML UTF-8 ( ). HTML <meta> . .

<title>	. ( </title> ) .
<body>	, . </body> .
<h1>	1 . .
<p>	.

1. ↑ [HTML5, 11.2](#)
2. ↑ .htm [DOS](#) .

**HTML** : <https://riptutorial.com/ko/html/topic/217/html->

# 2: CSS HTML

CSS HTML . . <style> . CSS <link> . .

- <link rel="stylesheet" type="text/css" href="stylesheet.css">
- <style></style>

## Examples

head link .

```
<head>
  <link rel="stylesheet" type="text/css" href="stylesheet.css">
</head>
```

CDN . (: ):

```
<head>
  <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css"
integrity="sha384-BVYiisSIFeK1dGmJRAkycuHAHRg32OmUcww7on3RYdg4Va+PmSTsz/K68vbdEjh4u"
crossorigin="anonymous">
</head>
```

CDN .

<style> CSS .

```
<head>
  <style type="text/css">
    body {
      background-color: gray;
    }
  </style>
</head>
```

```
<head>
  <style type="text/css">
    body {
      background-color: gray;
    }
  </style>

  <style type="text/css">
    p {
      background-color: blue;
    }
  </style>
</head>
```

style .

```
<span style="color: red">This text will appear in red.</span>
```

: CSS .

```
<head>
  <link rel="stylesheet" type="text/css" href="general.css">
  <link rel="stylesheet" type="text/css" href="specific.css">
</head>
```

. general.css

```
body {
  background-color: red;
}
```

specific.css .

```
body {
  background-color: blue;
}
```

CSS HTML : <https://riptutorial.com/ko/html/topic/4536/css--html->

# 3: Div

HTML div . div . div .

- `<div>example div</div>`

## Examples

`<div>` `<div>` . "" CSS .

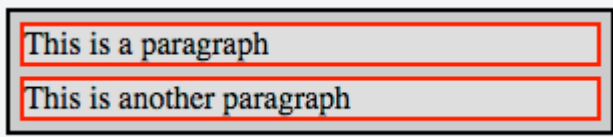
`<div class="outer-div">` `<div class="inner-div">` . `<p>` .

```

<div class="outer-div">
  <div class="inner-div">
    <p>This is a paragraph</p>
  </div>
  <div class="inner-div">
    <p>This is another paragraph</p>
  </div>
</div>

```

( CSS ).



. " ",

`<div>`

.

HTML . CSS3 . HTML .

div 6 .

`<div>` HTML . `<div>` .

```

<div>
  <p>Hello! This is a paragraph.</p>
</div>

```

div , HTML . CSS .

```

div {
  display: block;
}

```

**W3C (World Wide Web Consortium) div** . div .

<article> , <section> , <nav> <fieldset> .

div .

Div : <https://riptutorial.com/ko/html/topic/1468/div->



# 4: Doctypes

Doctypes - 'document type' - [HTML](#) . [Doctype HTML](#) . [HTML](#) .

- `<!DOCTYPE [ ]>`

`<!DOCTYPE HTML . HTML .. (DTD).`

`<!DOCTYPE . HTML W3C .`

- [doctype IE HTML](#) .
- [doctype quirks](#) . [MDN](#) .

## Examples

### Doctype

`<!DOCTYPE <html> HTML .`

5

[HTML 5 Doctype](#) [HTML 5 Doctype](#) .

---

```
<!DOCTYPE html>
```

4.01

[HTML 4.01 Doctypes](#) .

---

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN" "http://www.w3.org/TR/html4/strict.dtd">
```

---

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
```

---

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Frameset//EN"
"http://www.w3.org/TR/html4/frameset.dtd">
```

### HTML 4.01 Doctypes

HTML 4.01 [doctype](#) .

### HTML 4.01

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN" "http://www.w3.org/TR/html4/strict.dtd">
```

HTML .

## HTML 4.01

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
```

HTML .

## HTML 4.01

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Frameset//EN"
"http://www.w3.org/TR/html4/frameset.dtd">
```

HTML , . .

## HTML 5 Doctype

HTML5 SGML DTD .

HTML 5 Doctype :

```
<!DOCTYPE html>
```

[W3.org HTML 5 DOCTYPE](#) :

DOCTYPE .

1. "<!DOCTYPE" ASCII / .

DOCTYPE .

```
<!doctype html>
<!dOCTyPe html>
<!DocTYpe html>
```

SO : [doctype?](#)

## Doctypes

### HTML 3.2

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 3.2 Final//EN">
```

HTML 3.2 . HTML 3.2 HTML 4 .

---

## HTML 2.0

```
<!DOCTYPE HTML PUBLIC "-//IETF//DTD HTML//EN">
```

HTML 2.0 , .

Doctypes : <https://riptutorial.com/ko/html/topic/806/doctypes>

# 5: HTML 5

, ".appcache".

-

NETWORK -

FALLBACK -

## Examples

### Html 5

index.html .

```
<!DOCTYPE html>
<html manifest="index.appcache">
<body>
  <p>Content</p>
</body>
</html>
```

index.appcache .

```
CACHE MANIFEST
index.html
```

index.html .

:

**HTML 5** : <https://riptutorial.com/ko/html/topic/8024/html-5->

# 6: HTML

## Examples

### HTML

HTML (HTML ):

	.
	.
oncontextmenu	.
onfocus	.
onreset	.
	(<input = "search">).
onselect	.
	.

	.
onkeypress	.
onkeyup	.

HTML : <https://riptutorial.com/ko/html/topic/10924/html-->

# 7: HTML JavaScript

- `<script type="text/javascript"> //some code </script>`
- `<script type="text/javascript" src="URL"></script>`
- `<script type="text/javascript" src="URL" async>//async code</script>`

src	JavaScript . URL URL.
type	MIME . HTML4 HTML5 .
async	( ). XHTML .
defer	( ). XHTML .
charset	( : UTF-8).
crossorigin	
nonce	( CSP3)

JavaScript () <http://stackoverflow.com/documentation/javascript/503/document-object-model-dom>  
`<script></script>` `</body>` DOM JavaScript (: jQuery).

## Examples

### JavaScript

```
<script src="example.js"></script>
```

src href . URL . HTML . HTML `<head>`

HTML JS .

```
<script>  
// JavaScript code  
</script>
```

### JavaScript

```
<script type="text/javascript" src="URL" async></script>
```

Javascript Javascript . `<noscript>` .`<noscript>` Javascript .

```
<script>  
document.write("Hello, world!");
```

```
</script>  
<noscript>This browser does not support Javascript.</noscript>
```

HTML JavaScript : <https://riptutorial.com/ko/html/topic/3719/html-javascript-->

# 8: IFrame

name	iframe a src .
width	.
height	.
src	.
srcdoc	. HTML.
sandbox	iframe ,, . . .
allowfullscreen	iframe requestFullscreen()

iframe HTML .

iframe .

- HTML ;
- HTML ( - );
- PDF (IE ).

iframe iframe . iframe .

iframe . , iframe .

iFrame . iFrame iFrame .

[W3C iframe](#)

**sandbox**

sandbox iframe . .

allow-forms	.
allow-pointer-lock	JavaScript API .
allow-popups	window.open <a target="_blank" .
allow-same-origin	iframe . allow-scripts allow-scripts iframe .



allow-scripts	. iframe iframe	postMessage() API .	. allow-same-origin allow-same-origin
allow-top-navigation	iframe	.	

## Examples

"IFrame" . . base.html base.html .

```
<iframe src="base.html"></iframe>
```

IFrame width height . (HTML 4.01 , HTML 5 CSS ).

```
<iframe src="base.html" width="800" height="600"></iframe>
```

## IFrame

iframe IFrame (: IFrame ). IFrame IFrame . href URL target iframe name .

```
<iframe src="webpage.html" name="myIframe"></iframe>
<a href="different_webpage.html" target="myIframe">Change the Iframe content to
different_webpage.html</a>
```

## "srcdoc"

srcdoc src HTML iframe . "IFrame is cool!" IFrame .

```
<iframe srcdoc="<p>IFrames are cool!</p>"></iframe>
```

srcdoc IFrame src . src srcdoc srcdoc .

```
<iframe srcdoc="<p>IFrames are cool!</p>" src="base.html"></iframe>
```

srcdoc base.html .

```
<iframe sandbox src="http://example.com/"></iframe>
```

allow allow-scripts allow-forms sandbox attribute .

```
<iframe sandbox="allow-scripts allow-forms" src="http://example.com/"></iframe>
```

(: ) iframe JavaScript .

```
<iframe sandbox="allow-same-origin allow-top-navigation"
src="http://example.com/untrusted/comments/page2">
```

**IFrame** . allow-top-navigation **iframe** .

.

**iframe** . HTTP .

**IFrame** : <https://riptutorial.com/ko/html/topic/499/iframe>

# 9: SVG

SVG Scalable Vector Graphics . SVG .

HTML `<svg>` SVG .

SVG , , , .

SVG XML . HTML SVG . SVG CSS JavaScript .

SVG .

SVG .

## Examples

### SVG HTML

`<img>` `<object>` SVG . .

```

```

`<img>` CSS SVG SVG .

### object

```
<object type="image/svg+xml" data="attention.svg" width="50" height="50">
```

`<img>` `<img>` `<object>` SVG CSS .

### SVG

SVG HTML . SVG CSS JavaScript .

```
<body>
  <svg class="attention" xmlns="http://www.w3.org/2000/svg"
xmlns:xlink="http://www.w3.org/1999/xlink" viewBox="0 0 1000 1000" >
  <path id="attention" d="m571,767l0,-8,-5,-13t-12,-51-108,0q-7,0,-12,5t-
5,13l0,106q0,8,5,13t12,6l108,0q7,0,12,-6t5,-13Zm-1,-208l10,-257q0,-6,-5,-10q-7,-6,-14,-6l-
122,0q-7,0,-14,6q-5,4,-5,12l9,255q0,5,6,9t13,3l103,0q8,0,13,-3t6,-9Zm-7,-522l428,786q20,35,-
1,70q-10,17,-26,26t-35,10l-858,0q-18,0,-35,-10t-26,-26q-21,-35,-1,-70l429,-786q9,-17,26,-
27t36,-10t36,10t27,27Z" />
  </svg>
</body>
```

SVG CSS .

```
.attention {
  fill: red;
  width: 50px;
  height: 50px;
}
```



## CSS SVG

background-image SVG .

HTML :

```
<div class="attention"></div>
```

CSS :

```
.attention {
  background-image: url(attention.svg);
  background-size: 100% 100%;
  width: 50px;
  height: 50px;
}
```

url CSS .

```
background-image:
url(data:image/svg+xml,%3Csvg%20xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F2000%2Fsvg%22%20xmlns%3Axlink%3D%
106q0%2C-8%2C-5%2C-13t-12%2C-51-108%2C0q-7%2C0%2C-12%2C5t-
5%2C1310%2C106q0%2C8%2C5%2C13t12%2C61108%2C0q7%2C0%2C12%2C-6t5%2C-13Zm-1%2C-208110%2C-
257q0%2C-6%2C-5%2C-10q-7%2C-6%2C-14%2C-61-122%2C0q-7%2C0%2C-14%2C6q-5%2C4%2C-
5%2C1219%2C255q0%2C5%2C6%2C9t13%2C31103%2C0q8%2C0%2C13%2C-3t6%2C-9Zm-7%2C-
5221428%2C786q20%2C35%2C-1%2C70q-10%2C17%2C-26%2C26t-35%2C101-858%2C0q-18%2C0%2C-35%2C-10t-
26%2C-26q-21%2C-35%2C-1%2C-701429%2C-786q9%2C-17%2C26%2C-27t36%2C-
10t36%2C10t27%2C27Z%22%20%2F%3E%0D%0A%3C%2Fsvg%3E);
```

SVG : <https://riptutorial.com/ko/html/topic/1183/svg>

# 10:

HTML . , (void ) . HTML void .

void . Void .

HTML5 .

- area
- base
- br
- col
- embed
- hr
- img
- input
- keygen
- link
- meta
- param
- source
- track
- wbr

## Examples

HTML 4.01 / XHTML 1.0 Strict void .

- area -
- base - URL .
- br -
- col - []
- hr - ()
- img -
- input -
- link - .
- meta - .
- param - .

HTML 5 .

- command - [obsolete]
- keygen - . [deprecated]
- source - picture , audio video .

void .

```
<div>
  <a href="http://stackoverflow.com/">
```

```
<h3>Click here to visit <i>Stack Overflow!</i></h3>
</a>
<button onclick="alert('Hello!');">Say Hello!</button>
<p>My favorite language is <b>HTML</b>. Here are my others:</p>
<ol>
  <li>CSS</li>
  <li>JavaScript</li>
  <li>PHP</li>
</ol>
</div>
```

, . Void .

```

<br>
<hr>
<input type="number" placeholder="Enter your favorite number">
```

img void .img , / . .

: <https://riptutorial.com/ko/html/topic/1449/>

# 11:

HTML , , . HTML .

- `<ol>` ordered list items `</ol>`
- `<ul>` unordered list items `</ul>`
- `<li>` list item (ordered and not) `</li>`
- `<dl>` description list items `</dl>`
- `<dt>` description list title `</dt>`
- `<dd>` description list description `</dd>`

`<ul style="list-style-type:disc">` `<ul>` CSS . .

- "list-style-type : disc" .
- " : " .
- "list-style-type : square" .
- "list-style-type : none" .

`<ol type="1">` `<ol>` . .

- type = "1" .
- type = "A" .
- type = "a" .
- type = "I" .
- type = "i" .

## Examples

`<ul>` `<li>` .

```
<ul>
  <li>Item</li>
  <li>Another Item</li>
  <li>Yet Another Item</li>
</ul>
```

- 
- 
- 

ul . `<ol>` .

`<ol>` `<li>` .

```
<ol>
  <li>Item</li>
  <li>Another Item</li>
  <li>Yet Another Item</li>
```

```
</ol>
```

.

- 1.
- 2.
- 3.

. start . 1 .

```
<ol start="3">
  <li>Item</li>
  <li>Some Other Item</li>
  <li>Yet Another Item</li>
</ol>
```

.

- 3.
- 4.
- 5.

. 1 .

```
<li value="7"></li>
```

value . 7 4 4 .

```
<ol start="5">
  <li>Item</li>
  <li>Some Other Item</li>
  <li value="4">A Reset Item</li>
  <li>Another Item</li>
  <li>Yet Another Item</li>
</ol>
```

5, 6, 4, 5, 6 - 6 .

:start value .

5

ol reversed reversed .

```
<ol reversed>
  <li>Item</li>
  <li>Some Other Item</li>
  <li value="4">A Reset Item</li>
  <li>Another Item</li>
  <li>Yet Another Item</li>
</ol>
```



## podcast .

---

type .

```
<ol type="1|a|A|i|I">
```

1	- 10	1,2,3,4
a	()	a, b, c, d
A	()	A, B, C, D
i	()	i, ii, iii, iv
I	()	I, II, III, IV

ol , . <ul> .

(HTML5) dl . name-value dt dd .

```
<dl>
  <dt>name 1</dt>
  <dd>value for 1</dd>
  <dt>name 2</dt>
  <dd>value for 2</dd>
</dl>
```

- / () .

```
<dl>
  <dt>name 1</dt>
  <dt>name 2</dt>
  <dd>value for 1 and 2</dd>
  <dt>name 3</dt>
  <dd>value for 3</dd>
  <dd>value for 3</dd>
</dl>
```

```
<ul>
  <li>item 1</li>
  <li>item 2
    <ul>
      <li>sub-item 2.1</li>
      <li>sub-item 2.2</li>
    </ul>
  </li>
```

```
<li>item 3</li>
</ul>
```

- 1
- 2
  - 2.1
  - 2.2
- 3

li .

.

```
<ol>
  <li>Hello, list!</li>
  <li>
    <ul>
      <li>Hello, nested list!</li>
    </ul>
  </li>
</ol>
```

: <https://riptutorial.com/ko/html/topic/393/>

# 12:

src	
type	
width	
height	

## Examples

embed HTML5 . ( HTML) .

```
<embed src="myflash.swf">
```

## MIME

MIME type .

```
<embed type="video/mp4" src="video.mp4" width="640" height="480">
```

: <https://riptutorial.com/ko/html/topic/8123/>

# 13:

HTML . HTML .

<p>	.
 	.
<pre>	.

## Examples

HTML

HTML <p> .

```
<p>This is a paragraph.</p>
<p>This is another paragraph.</p>
```

-

HTML .

.

HTML HTML .

.

```
<p>This is another paragraph, extra spaces will be removed by browsers</p>
```

: <https://riptutorial.com/ko/html/topic/7997/>

---

# 14:

HTML5 .

## Examples

`<article>` , , RSS, , .

- `article` inner article outer article .

( `article` ) ( `article` ) ( `section` ) .

```
<section>
  <!-- Each individual blog post is an <article> -->
  <article>
    <header>
      <h1>Blog Post</h1>
      <time datetime="2016-03-13">13th March 2016</time>
    </header>

    <p>The article element represents a self contained article or document.</p>
    <p>The section element represents a grouping of content.</p>

    <section>
      <h2>Comments <small>relating to "Blog Post"</small></h2>

      <!-- Related comment is also a self-contained article -->
      <article id="user-comment-1">
        <p>Excellent!</p>
        <footer><p>...</p><time>...</time></footer>
      </article>
    </section>
  </article>

  <!-- ./repeat: <article> -->

</section>

<!-- Content unrelated to the blog or posts should be outside the section. -->
<footer>
  <p>This content should be unrelated to the blog.</p>
</footer>
```

---

( , , ) . `<article>` `<main>` `<main>` .

```
<article>
  <p>This doesn't make sense, this article has no real `context`.</p>
</article>
```

`<main>` main .

```
<main>
  <p>I'm the main content, I don't need to belong to an article.</p>
</main>
```

## HTML5 `<main>` ARIA .

```
<section role="main">
  <p>This section is the main content of this page.</p>
</section>
```

:

- `<main>` `<article>`

## `<article>` HTML5 .

`<main>` . . . , , .

- `<main>` .
- `<main>` `article` , `aside` , `footer` , `header` `nav` .

( ) .

```
<body>
  <header>
    <nav>...</nav>
  </header>

  <main>
    <h1>Individual Blog Post</h1>
    <p>An introduction for the post.</p>

    <article>
      <h2>References</h2>
      <p>...</p>
    </article>

    <article>
      <h2>Comments</h2> ...
    </article>
  </main>

  <footer>...</footer>
</body>
```

- `<main>` .
- `<header>` `<footer>` `<main>` .

:

HTML5 `<main>` .

- **ARIA** : `main ()`, `presentation`

`role="main" ARIA HTML5` .

`<main>` .

`<main>` **HTML5** .

`<nav>` (`:` ) .

```
<nav>
  <a href="https://google.com">Google</a>
  <a href="https://www.yahoo.com">Yahoo!</a>
  <a href="https://www.bing.com">Bing</a>
</nav>
```

`role="navigation"` .

```
<nav role="navigation">
  <ul>
    <li><a href="https://google.com">Google</a></li>
    <li><a href="https://www.yahoo.com">Yahoo!</a></li>
    <li><a href="https://www.bing.com">Bing</a></li>
  </ul>
</nav>
```

`<footer>` (**FAQ, T & C**) . `footer` . `<footer>` `<nav>` .

```
<!-- the <nav> is not required in the <footer> -->
<footer>
  <nav>
    <a href="#">...</a>
  </nav>
</footer>

<!-- The footer alone is sufficient -->
<footer>
  <a href="#">...</a>
</footer>
```

:

- `<main>` `<nav>`

`role="navigation"` `<nav>` [ARIA](#) [HTML5](#) [HTML5](#) .

```
<nav role="navigation"><!-- ... --></nav>
```

`:( )`

`<nav>` .

- `<nav>`
- .
- .
- `<nav>` .

`<nav>` [HTML5](#) .

`<section>` . , `section` .

- `<article>` `<section>` .
- `( )`
- `<section>` " " .
- `<div>` .

. `( )` .

```
<article>
  <header>
    <h2>Blog Post</h2>
  </header>
  <p>An introduction for the post.</p>
  <section>
    <h3>Chapter 1</h3>
    <p>...</p>
  </section>
  <section>
    <h3>Chapter 2</h3>
    <p>...</p>
  </section>
  <section>
    <h3>Comments</h3> ...
  </section>
</article>
```

:

**article** .

`<main>` [HTML5](#) .

`<header>` . `<header>` .



⋮ . .

⋮

```
<header>
  <p>Welcome to...</p>
  <h1>Voidwars!</h1>
</header>
```

`<article>` `<header>` .

```
<article>
  <header>
    <h1>Flexbox: The definitive guide</h1>
  </header>
  <p>The guide about Flexbox was supposed to be here, but it turned out Wes wasn't a Flexbox
  expert either.</p>
</article>
```

---

## W3C

`<footer>` .

`p` `<footer>` .

```
<footer>
  <p>All rights reserved</p>
</footer>
```

: <https://riptutorial.com/ko/html/topic/311/>

# 15:

- `<element data-custom-name="somevalue">`



## Examples

HTML5 `data-*` HTML . JavaScript .

```
<div data-submitted="yes" class="user_profile">
  ... some content ...
</div>
```

- `data-*` ., `data-` . . .
- ( json ) `data-*` .

HTML5 HTML5 .

HTML .

HTML . , `<img>` value value .

```

```

, JavaScript `setAttribute` `getAttribute` `dataset` `dataset` .

: <https://riptutorial.com/ko/html/topic/1182/>

# 16:

- `<label>Example <input type="radio" name="r"></label> //`
- `<label for="rad1">Example</label> <input id="rad1" type="radio" name="r"> // for`

...	ID	:	for="surname"
	<b>HTML5 , [Obsolete]</b>	.	<form> . form="someFormId" Label .

## Examples

...

```
<form action="/login" method="POST">

  <label for="username">Username:</label>
  <input id="username" type="text" name="username" />

  <label for="pass">Password:</label>
  <input id="pass" type="password" name="pass" />

  <input type="submit" name="submit" />

</form>
```

## 5

```
<form id="my-form" action="/login" method="POST">

  <input id="username" type="text" name="username" />

  <label for="pass">Password:</label>
  <input id="pass" type="password" name="pass" />

  <input type="submit" name="submit" />

</form>

<label for="username" form="my-form">Username:</label>
```

`<label>` .  
radio checkbox / .

**<label>**

.

```
<label>
  <input type="checkbox" name="Cats">
  I like Cats!
```

```
</label>
```

```
( input / )
```

```
<label>
```

```
for label for ID
```

```
<input id="cats" type="checkbox" name="Cats">  
<label for="cats" >I like Cats!</label>
```

```
<label> .
```

[: https://riptutorial.com/ko/html/topic/1704/-](https://riptutorial.com/ko/html/topic/1704/)

# 17:

, HTML . W HTML. f}.

- `<link rel="link-relation" type="mime-type" href="url">`
- `<script src="path-to-script"></script>`

charset	.
crossorigin	.
href	.
hreflang	.
media	.
rel	. .
rev	.
sizes	. rel="icon"
target	.
type	.
integrity	base64 (sha256, sha384 sha512).

## Examples

### CSS

```
<link rel="stylesheet" href="path/to.css" type="text/css">
```

HTML <head> CSS <link> . CSS HTML CSS . HTML5 CSS HTML5 type .

```
<link rel="stylesheet" href="path/to.css" type="text/css">
```

```
<link rel="stylesheet" href="path/to.css">
```

... HTML5 .

CSS @import . :

```
<style type="text/css">
  @import("path/to.css")
</style>
```

```
<style>
  @import("path/to.css")
</style>
```

```
<script src="path/to.js"></script>
```

`</body>` **JavaScript** `<script>` . **JavaScript** .

```
<script src="path/to.js" async></script>
```

, . `async` **Javascript** **HTML** .

```
<script src="path/to.js" defer></script>
```

**HTML** . .

## <noscript>

```
<noscript>JavaScript disabled</noscript>
```

`<noscript>` . `<noscript>` `<head>` `<body>` .

```
<link rel="icon" type="image/png" href="/favicon.png">
<link rel="shortcut icon" type="image/x-icon" href="/favicon.ico">
```

**PNG mime-type** `image/png` ( `*.ico` ) `image/x-icon` . [SO](#) .

`favicon.ico` `<link>` . .

## CSS

```
<link rel="alternate stylesheet" href="path/to/style.css" title="yourTitle">
```

. .

**Firefox**> **Internet Explorer**> ( **IE 11** ) **Internet Explorer** ( **IE 11** ) . ( **48** ) .

( : [MDN](#) )

rel="alternate" Atom / RSS .

```
<link rel="alternate" type="application/atom+xml" href="http://example.com/feed.xml" />
<link rel="alternate" type="application/rss+xml" href="http://example.com/feed.xml" />
```

RSS Atomic RSS MDN .

"

```
<link rel="stylesheet" href="test.css" media="print">
```

Media .print print .

mediatype (CSS ).

prev next prev next .

```
<link rel="prev" href="http://stackoverflow.com/documentation/java/topics">
<link rel="next" href="http://stackoverflow.com/documentation/css/topics">
```

## : dns-prefetch, prefetch, prerender

preconnect DNS dns-prefetch . TCP TLS . .

```
<link rel="preconnect" href="URL">
```

## DNS-

URL DNS URL .

```
<link rel="dns-prefetch" href="URL">
```

.

```
<link rel="prefetch" href="URL">
```

DNS-Prefetch /. .

URL URL . .

```
<link rel="prerender" href="URL">
```

: <https://riptutorial.com/ko/html/topic/712/>-



# 18:

`cite` `blockquote` , , , .

## Examples

`q` .

```
<p>She wrote <q>The answer is 42.</q> and everyone agreed.</p>
```

4.01

. (HTML 4.01) resp. (HTML 4.0) .

5

. .

### URL ( `cite` )

`cite` URL .

```
<p>She wrote <q cite="http://example.com/blog/hello-world">The answer is 42.</q> and everyone agreed.</p>
```

, ( , URL ). a

`blockquote` ( ) .

```
<blockquote>
  <p>The answer is 42.</p>
</blockquote>
```

### URL ( `cite` )

`cite` URL .

```
<blockquote cite="http://example.com/blog/hello-world">
  <p>The answer is 42.</p>
</blockquote>
```

, ( , URL ) ( / ). a

/

4.01

/ blockquote :

```
<blockquote cite="http://example.com/blog/hello-world">
  <p>The answer is 42.</p>
</blockquote>
<p>Source: <cite><a href="http://example.com/blog/hello-world" rel="external">Hello
World</a></cite></p>
```

div .

**cite** .

5

citation / attribution ( : URL ) blockquote cite ( ) footer .

```
<blockquote cite="http://example.com/blog/hello-world">
  <p>The answer is 42.</p>
  <footer>
    <p>Source: <cite><a href="http://example.com/blog/hello-world" rel="external">Hello
World</a></cite></p>
  </footer>
</blockquote>
```

**cite** .

: <https://riptutorial.com/ko/html/topic/2943/-->

# 19:

HTML , , , 90 . . .

- `<meta name="metadata name" content="value">`
- `<meta http-equiv="pragma directive" content="value">`
- `<meta charset="encoding label">`

HTML HTML . head . . .

keywords . . . , . . .

( : ) (Google, Yahoo !, Bing) .

`<meta name>` `<meta http-equiv>` . ( , , ) `<meta name>` . [wiki](#) .

## Examples

charset HTML ( : windows-1252 , ISO-8859-2 , Shift\_JIS UTF-8 ) . UTF-8 ( ) .

5

```
<meta charset="UTF-8">
```

```
<meta charset="ISO-8859-1">
```

`<meta charset>` , HTML 4.01 .

```
<meta http-equiv="content-type" content="text/html; charset=UTF-8">
```

```
<meta http-equiv="content-type" content="text/html; charset=ISO-8859-1">
```

.

5 head meta .

```
<meta http-equiv="refresh" content="5">
```

! . . . .

`<meta name="viewport">` .

```
<meta name="viewport" content="width=device-width, initial-scale=1">
```

viewport .

, content="width=device-width" . 480px wide 480px wide . initial-scale=1 ( 1 ) .

width	1: 480 device-width ( )
height	2: 600 device-height ( )
initial-scale	/. 1.0 / .
minimum-scale	. 1.0 / .
maximum-scale	. 1.0 / .
user-scalable	. yes no . . <b>yes.</b> .

:

1 width ( width=600 ) *device-width* ( width=device-width ) .

2 height pixels ( height=600 ) height=device-height device-height ( height=device-height ) .

**application-name**

.

```
<meta name="application-name" content="OpenStreetMap">
```

application-name .

**author**

:

```
<meta name="author" content="Your Name">
```

.

**description**

.

```
<meta name="description" content="Page Description">
```

description . / . Google 20-25 .

**generator**

```
<meta name="generator" content="HTML Generator 1.42">
```

. . .

**keywords**

( ):

```
<meta name="keywords" content="Keyword1, Keyword2">
```

keywords .  
, ~ 20 . . .

robots .

```
<meta name="robots" content="noindex">
```

. . .

/	
all	. index, follow . .
noindex	.
nofollow	.
follow	. .
none	noindex, nofollow .
noarchive	.
nocache	<b>Bing</b> noarchive .
nosnippet	.
noodp	<b>Open Directory</b> .
notranslate	.
noimageindex	.
unavailable_after [RFC-850 date/time]	/ . / <b>RFC 850</b> .

: index follow, . . robots.txt . . . index, ..., noindex (:index, ..., noindex)  
) .

iOS tel: link . ISBN .

## Safari WebKit

```
<meta name="format-detection" content="telephone=no">
```

## Open Graph

Facebook OG

/

```
<meta property="fb:app_id" content="123456789">
<meta property="og:url" content="https://example.com/page.html">
<meta property="og:type" content="website">
<meta property="og:title" content="Content Title">
<meta property="og:image" content="https://example.com/image.jpg">
<meta property="og:description" content="Description Here">
<meta property="og:site_name" content="Site Name">
<meta property="og:locale" content="en_US">
<meta property="article:author" content="">
<!-- Facebook: https://developers.facebook.com/docs/sharing/webmasters#markup -->
<!-- Open Graph: http://ogp.me/ -->
```

- 
- [Open Graph](#)

/

```
<meta charset="utf-8">
<meta property="op:markup_version" content="v1.0">

<!-- The URL of the web version of your article -->
<link rel="canonical" href="http://example.com/article.html">

<!-- The style to be used for this article -->
<meta property="fb:article_style" content="myarticlestyle">
```

- :
- :

## Twitter

```
<meta name="twitter:card" content="summary">
<meta name="twitter:site" content="@site_account">
<meta name="twitter:creator" content="@individual_account">
<meta name="twitter:url" content="https://example.com/page.html">
<meta name="twitter:title" content="Content Title">
<meta name="twitter:description" content="Content description less than 200 characters">
<meta name="twitter:image" content="https://example.com/image.jpg">
```

- [Twitter](#) :
- 

## Google+ / Schema.org

```
<link href="https://plus.google.com/+YourPage" rel="publisher">
<meta itemprop="name" content="Content Title">
<meta itemprop="description" content="Content description less than 200 characters">
<meta itemprop="image" content="https://example.com/image.jpg">
```

, 5 example.com .

```
<meta http-equiv="refresh" content="5;url=https://www.example.com/" />
```

( 5 example.com .

;url= .

Android Chrome " " " " .

( ) .

Android Chrome

```
<meta name="mobile-web-app-capable" content="yes">
```

IOS

```
<meta name="apple-mobile-web-app-capable" content="yes">
```

Android Chrome

```
<meta name="theme-color" content="black">
```

IOS

```
<meta name="apple-mobile-web-app-status-bar-style" content="black">
```

: <https://riptutorial.com/ko/html/topic/1264/>

# 20:

## Examples

HTML HTML . (<>) . HTML . ASCII .

. &entity\_name; &entity\_name; &entity\_number;. HTML .

" "	&nbsp;	&#160;
"<"	&lt;	&#60;
">"	&gt;	&#62;
"&"	&amp;	&#38;
"-"	&mdash;	&#8212;
"-"	&ndash;	&#8211;
"©"	&copy;	&#169;
"®"	&reg;	&#174;
"™"	&trade;	&#8482;
"☎"	&phone;	&#9742;

,

© 2016 Stack Exchange Inc.

HTML .

```
<b>&copy; 2016 Stack Exchange Inc.</b>
```

## HTML

html html . org ''.

'Entity Name'- & entity\_name; ''- & entity\_number; .

<https://dev.w3.org/html5/html-author/charref> .

'magnifying glass' :



```
<input type="text" placeholder=" 🔍 Search" />
```

.

: [https://riptutorial.com/ko/html/topic/5229/-](https://riptutorial.com/ko/html/topic/5229/)

# 21:

	.
	.
<source>	.
	.
	.
	.

		Firefox ()			
	3.0	3.5 (1.9.1)	9.0	10.50	3.1
<audio> : WAVE PCM	()	3.5 (1.9.1)		10.50	3.1
<audio> : WebM	()	4.0 (2.0)		10.60	3.1
<audio> : MSE WebM Vorbis / Opus	?	36.0	?	?	?
<audio> : Ogg	()	3.5 (1.9.1)		10.50	
<audio> : MP3	()	()	9.0	()	3.1
<audio> : MP4 MP3	?	?	?	?	()
<audio> : MP4 AAC	()	()	9.0	()	3.1
<audio> :	27.0	15.0 (15.0)	?	?	?
<video> : VPM Vorbis WebM	6.0	4.0 (2.0)	9.0	10.60	3.1
<video> : VP9 Opus	29.0	28.0 (28.0)	?	()	?
<video> : MSE	?	42.0 (42.0)	?	?	?
<video> :	()	3.5 (1.9.1)		10.50	
<video> : MP4 H.264 MP3	()	()	9.0	()	()
<video> : MP4 H.264 AAC	()	()	9.0	()	3.1

		Firefox ()			
					3.1

## Examples

```` /

HTML `<audio>` / . / / . **src** `<source>` . .

:

```

<!-- Simple video example -->
<video src="videofile.webm" autoplay poster="posterimage.jpg">
  Sorry, your browser doesn't support embedded videos,
  but don't worry, you can <a href="videofile.webm">download it</a>
  and watch it with your favorite video player!
</video>

<!-- Video with subtitles -->
<video src="foo.webm">
  <track kind="subtitles" src="foo.en.vtt" srclang="en" label="English">
  <track kind="subtitles" src="foo.sv.vtt" srclang="sv" label="Svenska">
</video>

<!-- Simple video example -->
<video width="480" controls poster="https://archive.org/download/WebmVp8Vorbis/webmvp8.gif" >
  <source src="https://archive.org/download/WebmVp8Vorbis/webmvp8.webm" type="video/webm">
  <source src="https://archive.org/download/WebmVp8Vorbis/webmvp8_512kb.mp4" type="video/mp4">
  <source src="https://archive.org/download/WebmVp8Vorbis/webmvp8.ogv" type="video/ogg">
  Your browser doesn't support HTML5 video tag.
</video>

```

:

```

<!-- Simple audio playback -->
<audio src="http://developer.mozilla.org/@api/deki/files/2926/=AudioTest_(1).ogg" autoplay>
  Your browser does not support the <code>audio</code> element.
</audio>

<!-- Audio playback with captions -->
<audio src="foo.ogg">
  <track kind="captions" src="foo.en.vtt" srclang="en" label="English">
  <track kind="captions" src="foo.sv.vtt" srclang="sv" label="Svenska">
</audio>

```

HTML5 .

`<audio>` .

```

<audio controls>
  <source src="file.mp3" type="audio/mpeg">
  Your browser does not support the audio element.
</audio>

```

<video> .

```
<video width="500" height="700" controls>
  <source src="video.mp4" type="video/mp4">
  Your browser does not support the video tag.
</video>
```

. .

```
<video width="1280" height="720" autoplay muted loop poster="video.jpg" id="videobg">
  <source src="video.mp4" type="video/mp4">
  <source src="video.webm" type="video/webm">
  <source src="video.ogv" type="video/ogg">
</video>
```

CSS . poster video.jpg .

```
#videobg {
  background: url(video.jpg) no-repeat;
  background-size: cover;
}
```

: <https://riptutorial.com/ko/html/topic/2111/>

## 22:

- `<select name=""></select>`
- `<datalist id=""></datalist>`
- `<optgroup label="Option Group"></optgroup>`
- `<option value="">Option</option>`

## Examples

`<select>` .

```
<select name="">
  <option value="1">One</option>
  <option value="2">Two</option>
  <option value="3">Three</option>
  <option value="4">Four</option>
</select>
```

size . 0 1 .1 . .

```
<select name="" size="4"></select>
```

.multiple .multiple . .

```
<select name="" multiple></select>
```

multiple multiple 0 1 .0 .1 .

`<optgroup>` .

label 0 .

```
<select name="">
  <option value="milk">Milk</option>
  <optgroup label="Fruits">
    <option value="banana">Bananas</option>
    <option value="strawberry">Strawberries</option>
  </optgroup>
  <optgroup label="Vegetables" disabled>
    <option value="carrot">Carrots</option>
    <option value="zucchini">Zucchini</option>
  </optgroup>
</select>
```

. .

. .

```
<option>Some Option</option>
```

<option> .

value label. ( ). . "" :

```
<option label="Some Option" value="Some Option">
```

. , . .

```
<option value="option1">Some Option</option>
```

selected . . selected .

```
<option value="option1" selected>Some option</option>
```

.

```
<select multiple>
  <option value="option1" selected>Some option</option>
  <option value="option2" selected>Some option</option>
</select>
```

## Datalist

<datalist> <input> . <input> "autocomplete" .

```
<input list="Languages">

<datalist id="Languages">
  <option value="PHP">
  <option value="Perl">
  <option value="Python">
  <option value="Ruby">
  <option value="C+">
</datalist>
```

\_\_\_\_\_

|      |      |     |     |
|------|------|-----|-----|
| 20.0 | 10.0 | 4.0 | 9.0 |
|------|------|-----|-----|

: <https://riptutorial.com/ko/html/topic/722/-->

---

## 23:

- -
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- 
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- 
- 
- -
- -
- -
- - labelledby
- 
- -
- -

ARIA . ARIA ( : ) .

## Examples

role = ""

, .

```
<div role="alert" aria-live="assertive">Your session will expire in 60 seconds.</div>
```

```
role="alert"
```

aria-live="assertive" . . .

- Heydon Pickering 'ARIA'

## role = "alertdialog"

, .

```
<div role="alertdialog">
  <h1>Warning</h1>
  <div role="alert">Your session will expire in 60 seconds.</div>
</div>
```

= ""

. .

```
<div role="application">
  <h1>Calculator</h1>
  <input id="num1" type="text"> + <input id="num2" type="text"> =
  <span id="result"></span>
</div>
```

## role = "article"

, .

ARIA ARIA / aria-\*

```
<article>
  <h1>My first article</h1>
  <p>Lorem ipsum...</p>
</article>
```

role=article ( , ).

```
<div role="article">
  <h1>My first article</h1>
  <p>Lorem ipsum...</p>
</div>
```

role=article W3C role=article

= ""

.

```
<div role="banner">
```



```
<h1>My Site</h1>

<ul>
  <li><a href="/">Home</a></li>
  <li><a href="/about">About</a></li>
  <li><a href="/contact">Contact</a></li>
</ul>
</div>
```

= ""

.

```
<button role="button">Add</button>
```

= ""

.

```
<table>
  <thead>
    <!-- etc -->
  </thead>
  <tbody>
    <td role="cell">95</td>
    <td role="cell">14</td>
    <td role="cell">25</td>
  </tbody>
</table>
```

**role = " "**

true, false mixed .

```
<p>
  <input type="checkbox" role="checkbox" aria-checked="false">
  I agree to the terms
</p>
```

**role = "columnheader"**

.

```
<table role="grid">
  <thead>
    <tr>
      <th role="columnheader">Day 1</th>
      <th role="columnheader">Day 2</th>
      <th role="columnheader">Day 3</th>
    </tr>
  </thead>
  <tbody>
```

```
<!-- etc -->
</tbody>
<table>
```

## role = "combobox"

;

```
<input type="text" role="combobox" aria-expanded="false">
```

## JavaScript

= ""

## DOM

```
<div role="complementary">
  <h2>More Articles</h2>

  <ul>
    <!-- etc -->
  </ul>
</div>
```

## role = "contentinfo"

.

```
<p role="contentinfo">
  Author: Albert Einstein<br>
  Published: August 15, 1940
</p>
```

= ""

.

```
<span role="term" aria-labelledby="def1">Love</span>
<span id="def1" role="definition">an intense feeling of deep affection.</span>
```

## role = "dialog"

.

```
<div role="dialog">
  <p>Are you sure?</p>
  <button role="button">Yes</button>
  <button role="button">No</button>
</div>
```

## role = "directory"

```
<ul role="directory">
  <li><a href="/chapter-1">Chapter 1</a></li>
  <li><a href="/chapter-2">Chapter 2</a></li>
  <li><a href="/chapter-3">Chapter 3</a></li>
</ul>
```

= ""

```
<div role="document">
  <h1>The Life of Albert Einstein</h1>
  <p>Lorem ipsum...</p>
</div>
```

= ""

HTML `<form>` ARIA `role="form"` .

ARIA `aria-*` .

```
<form action="">
  <fieldset>
    <legend>Login form</legend>
    <div>
      <label for="username">Your username</label>
      <input type="text" id="username" aria-describedby="username-tip" required />
      <div role="tooltip" id="username-tip">Your username is your email address</div>
    </div>
    <div>
      <label for="password">Your password</label>
      <input type="text" id="password" aria-describedby="password-tip" required />
      <div role="tooltip" id="password-tip">Was emailed to you when you signed up</div>
    </div>
  </fieldset>
</form>
```

role="form" ( , ).

```
<div role="form">
  <input type="email" placeholder="Your email address">
  <button>Sign up</button>
</div>
```

= ""

```
<table role="grid">
  <thead>
    <!-- etc -->
  </thead>
  <tbody>
    <!-- etc -->
  </tbody>
</table>
```

= " "

```
<table role="grid">
  <thead>
    <!-- etc -->
  </thead>
  <tbody>
    <tr>
      <td role="gridcell">17</td>
      <td role="gridcell">64</td>
      <td role="gridcell">18</td>
    </tr>
  </tbody>
</table>
```

= ""

```
<div role="group">
  <button role="button">Previous</button>
  <button role="button">Next</button>
</div>
```

= ""

```
<h1 role="heading">Introduction</h1>
<p>Lorem ipsum...</p>
```

= "img"

```
<figure role="img">
  
  <figcaption>This is my cat, Albert.</figcaption>
</figure>
```

= ""

.

ARIA [ARIA](#) aria- \* .

- <https://www.w3.org/TR/html5/dom.html#aria-usage-note>

= ""

.

```
<ul role="list">
  <li role="listitem">One</li>
  <li role="listitem">Two</li>
  <li role="listitem">Three</li>
</ul>
```

= " "

.

```
<ul role="listbox">
  <li>One</li>
  <li>Two</li>
  <li>Three</li>
</ul>
```

JavaScript .

**role = "listitem"**

.

```
<ul role="list">
  <li role="listitem">One</li>
  <li role="listitem">Two</li>
  <li role="listitem">Three</li>
</ul>
```

= ""

.

```
<ul role="log">
  <li>User 1 logged in.</li>
  <li>User 2 logged in.</li>
  <li>User 1 logged out.</li>
</ul>
```

= ""

.

```
<!-- header & nav here -->
<div role="main">
  <p>Lorem ipsum...</p>
</div>
<!-- footer here -->
```

## role = "marquee"

.

```
<ul role="marquee">
  <li>Dow +0.26%</li>
  <li>Nasdaq +0.54%</li>
  <li>S&amp;P +0.44%</li>
</ul>
```

= ""

.

```

```

= ""

.

```
<ul role="menu">
  <li role="menuitem">New</li>
  <li role="menuitem">Open</li>
  <li role="menuitem">Save</li>
  <li role="menuitem">Close</li>
</ul>
```

## role = "menubar"

.

```
<ul role="menubar">
  <li role="menuitem">File</li>
  <li role="menuitem">Edit</li>
  <li role="menuitem">View</li>
  <li role="menuitem">Help</li>
</ul>
```

## role = "menuitem"

```
<ul role="menubar">
  <li role="menuitem">File</li>
  <li role="menuitem">Edit</li>
  <li role="menuitem">View</li>
  <li role="menuitem">Help</li>
</ul>
```

## role = "menuitemcheckbox"

3 true, false mixed menuitem.

```
<ul role="menu">
  <li role="menuitem">Console</li>
  <li role="menuitem">Layout</li>
  <li role="menuitemcheckbox" aria-checked="true">Word wrap</li>
</ul>
```

## role = "menuitemradio"

menuitemradio . . .

```
<ul role="menu">
  <li role="menuitemradio" aria-checked="true">Left</li>
  <li role="menuitemradio" aria-checked="false">Center</li>
  <li role="menuitemradio" aria-checked="false">Right</li>
</ul>
```

## role = "navigation"

().

```
<ul role="navigation">
  <li><a href="/">Home</a></li>
  <li><a href="/about">About</a></li>
  <li><a href="/contact">Contact</a></li>
</ul>
```

= ""

```
<p>Lorem ipsum...</p>
<p>Lorem ipsum...</p>
<p role="note">Lorem ipsum...</p>
```

role = ""

```
<ul role="listbox">
  <li role="option">Option 1</li>
  <li role="option">Option 2</li>
  <li role="option">Option 3</li>
</ul>
```

## role = "presentation"

API .

```
<div style="float:left;">Some content on the left.</div>
<div style="float:right;">Some content on the right</div>
<div role="presentation" style="clear:both;"></div> <!-- Only used to clear floats -->
```

## role = "progressbar"

```
<progress role="progressbar" value="25" max="100">25%</progress>
```

= ""

```
<div role="radiogroup">
  <input role="radio" type="radio" aria-checked="true"> One<br>
  <input role="radio" type="radio" aria-checked="false"> Two<br>
  <input role="radio" type="radio" aria-checked="false"> Three
</div>
```

= ""

(: ) .

```
<div role="region">
  Home team: 4<br>
  Away team: 2
</div>
```

= " "

```
<div role="radiogroup">
  <input role="radio" type="radio" aria-checked="true"> One<br>
  <input role="radio" type="radio" aria-checked="false"> Two<br>
  <input role="radio" type="radio" aria-checked="false"> Three
</div>
```



= ""

.

```
<table>
  <thead>
    <!-- etc -->
  </thead>
  <tbody>
    <tr role="row">
      <!-- etc -->
    </tr>
  </tbody>
</table>
```

**role = "rowgroup"**

.

```
<table>
  <thead role="rowgroup">
    <!-- etc -->
  </thead>
  <tbody role="rowgroup">
    <!-- etc -->
  </tbody>
</table>
```

**role = "rowheader"**

.

```
<table role="grid">
  <thead>
    <!-- etc -->
  </thead>
  <tbody>
    <tr>
      <th role="rowheader">Day 1</th>
      <td>65</td>
    </tr>
    <tr>
      <th role="rowheader">Day 2</th>
      <td>74</td>
    </tr>
  </tbody>
</table>
```

**role = ""**

.

```
<div id="content1">Lorem ipsum...</div>
```

```
<div
  role="scrollbar"
  aria-controls="content1"
  aria-orientation="vertical"
  aria-valuemax="100"
  aria-valuemin="0"
  aria-valuenow="25">
  <div class="scrollhandle"></div>
</div>
```

= ""

.

```
<div role="search">
  <input role="searchbox" type="text">
  <button role="button">Search</button>
</div>
```

## role = "searchbox"

.

```
<div role="search">
  <input role="searchbox" type="text">
  <button role="button">Search</button>
</div>
```

## role = "separator"

.

```
<p>Lorem ipsum...</p>
<hr role="separator">
<p>Lorem ipsum...</p>
```

= ""

.

```
<div
  role="slider"
  aria-valuemax="100"
  aria-valuemin="0"
  aria-valuenow="25">
  <div class="sliderhandle"></div>
</div>
```

## role = "spinbutton"

.

```
<input
  role="spinbutton"
  aria-valuemax="100"
  aria-valuemin="0"
  aria-valuenow="25"
  type="number"
  value="25">
```

= ""

.

```
<div role="status">Online</div>
```

## role = "switch"

/ on / off .

```
<select role="switch" aria-checked="false">
  <option>On</option>
  <option selected>Off</option>
</select>
```

= ""

.

```
<ul role="tablist">
  <li role="tab">Introduction</li>
  <li role="tab">Chapter 1</li>
  <li role="tab">Chapter 2</li>
</ul>
```

= ""

. . .

```
<table role="table">
  <thead>
    <!-- etc -->
  </thead>
  <tbody>
    <!-- etc -->
  </tbody>
</table>
```

= " "

tabpanel .

```
<ul role="tablist">
  <li role="tab">Introduction</li>
  <li role="tab">Chapter 1</li>
  <li role="tab">Chapter 2</li>
</ul>
```

## role = "tabpanel"

```
<ul role="tablist">
  <li role="tab">Introduction</li>
  <li role="tab">Chapter 1</li>
  <li role="tab">Chapter 2</li>
</ul>
<div role="tabpanel">
  <!-- etc -->
</div>
```

## role = ""

```
<textarea role="textbox"></textarea>
```

= ""

```
<p>
  <span role="timer">60</span> seconds remaining.
</p>
```

= ""

```
<ul role="toolbar">
  <li></li>
  <li></li>
  <li></li>
  <li></li>
</ul>
```

## role = ""

```
<span aria-describedby="slopedesc">Slope</span>
<div role="tooltip" id="slopedesc">y=mx+b</div>
```

=" "

```
<ul role="tree">
  <li role="treeitem">
    Part 1
    <ul>
      <li role="treeitem">Chapter 1</li>
      <li role="treeitem">Chapter 2</li>
      <li role="treeitem">Chapter 3</li>
    </ul>
  </li>
  <li role="treeitem">
    Part 2
    <ul>
      <li role="treeitem">Chapter 4</li>
      <li role="treeitem">Chapter 5</li>
      <li role="treeitem">Chapter 6</li>
    </ul>
  </li>
  <li role="treeitem">
    Part 3
    <ul>
      <li role="treeitem">Chapter 7</li>
      <li role="treeitem">Chapter 8</li>
      <li role="treeitem">Chapter 9</li>
    </ul>
  </li>
</ul>
```

## role = "treegrid"

## role = "treeitem"

```
<ul role="tree">
  <li role="treeitem">
    Part 1
    <ul>
      <li role="treeitem">Chapter 1</li>
      <li role="treeitem">Chapter 2</li>
      <li role="treeitem">Chapter 3</li>
    </ul>
  </li>
  <li role="treeitem">
    Part 2
    <ul>
      <li role="treeitem">Chapter 4</li>
      <li role="treeitem">Chapter 5</li>
      <li role="treeitem">Chapter 6</li>
    </ul>
  </li>
</ul>
```

```
</ul>
</li>
<li role="treeitem">
  Part 3
  <ul>
    <li role="treeitem">Chapter 7</li>
    <li role="treeitem">Chapter 8</li>
    <li role="treeitem">Chapter 9</li>
  </ul>
</li>
</ul>
```

: <https://riptutorial.com/ko/html/topic/2734/>

# 24:

, . HTML .

- `<a href="URL or anchor">Link Text</a>`

|          |                                                                                                                                  |
|----------|----------------------------------------------------------------------------------------------------------------------------------|
| href     | . URL name . URL <a href="http://example.com/">http://example.com/</a> URL. URL / . /about-us/ ( / ) "about-us" . "index.html" . |
| hreflang | href . href . HTML5 <a href="#">BCP 47</a> , HTML 4 <a href="#">RFC 1766</a> .                                                   |
| rel      | . HTML5 <a href="#">Microformats wiki</a> .                                                                                      |
| target   | . _blank , _self , _parent , _top framename ( ) .                                                                                |
| title    | . . HTML .                                                                                                                       |
| download | . . (.img, .pdf) .                                                                                                               |

## Examples

`<a>` ([Anchor](#)) :

```
<a href="http://example.com/">Link to example.com</a>
```

"link to example.com" href ( ) URL <http://example.com/> . :

[example.com](http://example.com/)

external .

```
<a href="http://example.com/" rel="external">example site</a>
```

HTTP . , FTP ,

```
<a href="ftp://example.com/">This could be a link to a FTP site</a>
```

HTTP (Hypertext Transfer Protocol) FTP (File Transfer Protocol) [example.com](http://example.com/) .

[FTP](#) .

/

```
<a href="example.com" target="_blank">Text Here</a>
```

target . \_blank ( ) .

!

```
target="_blank" window.opener , window.opener.location .
```

```
rel="noopener" window.opener .
```

**Firefox** noopener rel="noopener noreferrer" rel="noopener noreferrer" .

HTML . <a> id . ID ID . .

( page1.html ) .

```
<h2>First topic</h2>
<p>Content about the first topic</p>
<h2>Second topic</h2>
<p>Content about the second topic</p>
```

( ) .

id

```
<h2 id="Topic1">First topic</h2>
<p>Content about the first topic</p>
<h2 id="Topic2">Second topic</h2>
<p>Content about the second topic</p>
```

```
<h1>Table of Contents</h1>
  <a href="#Topic1">Click to jump to the First Topic</a>
  <a href="#Topic2">Click to jump to the Second Topic</a>
```

( page1.html ) . .

Remember, you can always `<a href="page1.html#Topic1">look back in the First Topic</a>` for supporting information.

## JavaScript

javascript: JavaScript .

```
<a href="javascript:myFunction();">Run Code</a>
```

onclick .

```
<a href="#" onclick="myFunction(); return false;">Run Code</a>
```



```
return false; # . . .
```

```
! ( id="#" ) . ( :#scrollsNowhere ) . return false; :
```

```
<a href="#" onclick="myFunction();">Run Code</a>
```

?

. . JavaScript .

. <button> .

.

```
<a href="/example">Text Here</a>
```

( / ) example .

---

<http://example.com> .

```
<a href="/page">Text Here</a>
<a href="http://example.com/page">Text Here</a>
```

example.com page .

href -attribute **mailto:** .

```
<a href="mailto:example@example.com">Send email</a>
```

example@example.com .

---

```
<a href="mailto:example@example.com?cc=john@example.com&bcc=jane@example.com">Send email</a>
```

---

```
<a href="mailto:example@example.com?subject=Example+subject&body=Message+text">Send email</a>
```

**URL** .

---

mailto: . .

href -attribute **tel:** tel: . **Skype FaceTime** / .

```
<a href="tel:11234567890">Call us</a>
```

.

: <https://riptutorial.com/ko/html/topic/254/--->

# 25:

## HTML . . . HTML .

- `<form method="post|get" action="somePage.php" target="_blank|_self|_parent|_top|frameName">`

|                |                    |
|----------------|--------------------|
| accept-charset | .                  |
| action         | .                  |
| autocomplete   | .                  |
| enctype        | (method = "post"). |
| method         | (POST GET) HTTP .  |
| name           | .                  |
| novalidate     | .                  |
| target         | .                  |

`<form>` ( : `<button>` `<fieldset>` `<input>` `<label>` `<output>` `<select>` `<textarea>` ) . ( `<form>` ) ( `</form>` ) .

## Examples

**action** . . .

```
<form action="action.php">
```

**method GET POST HTTP** .

```
<form action="action.php" method="get">
<form action="action.php" method="post">
```

**GET** ( : ID ) . **GET** URL .

```
www.example.com/action.php?firstname=Mickey&lastname=Mouse
```

**POST** . **POST** URL .

.  
.

```
<input type="text" name="lastname" value="Mouse">
```

```
<form action="action.php" method="post" target="_blank" accept-charset="UTF-8"
  enctype="application/x-www-form-urlencoded" autocomplete="off" novalidate>
```

```
<!-- form elements -->
```

```
</form>
```

target .

target (:, ) .

:

```
<form target="_blank">
```

|   |          |
|---|----------|
|   |          |
| - | .        |
| - | ().      |
| - | .        |
| - | .        |
|   | iframe . |

: target **HTML 4.01** . target **HTML5** .

**HTML5** `_parent, _top` *filename* *iframe* .

form enctype multipart/form-data / . enctype .

```
<form method="post" enctype="multipart/form-data" action="upload.php">
  <input type="file" name="pic" />
  <input type="submit" value="Upload" />
</form>
```

. . .

## LEGEND TEXT

```
<form>
  <fieldset>
    <legend>1st field set:</legend>
    Field one:<br>
    <input type="text"><br>
    Field two:<br>
    <input type="text"><br>
```

```
</fieldset><br>
<fieldset>
  <legend>2nd field set:</legend>
  Field three:<br>
  <input type="text"><br>
  Field four:<br>
  <input type="text"><br>
</fieldset><br>
<input type="submit" value="Submit">
</form>
```

1st field set:

Field one:

Field two:

2nd field set:

Field three:

Field four:

Chrome, IE, Edge, FireFox, Safari Opera .

: <https://riptutorial.com/ko/html/topic/1160/>

# 26:

- `<img src="" alt="">`

|             |        |
|-------------|--------|
| src         | URL .  |
| srcset      | (: , ) |
| sizes       |        |
| crossorigin |        |
| usemap      |        |
| ismap       |        |
| alt         |        |
| width       | ( ).   |
| height      | ( ).   |

## Examples

.

(img) .img src, alt .

```

```

URL .

```

```

: HTML HTML .<img> .

base64 .

```

```

: <a> <img> .

**: width height** . .

width height .

```

```

width height . . " " .

## 4.1

### CSS

```
  
  
  

```

## 5

CSS . . width height .

```
  
  

```

```

```

```
  

```

Alt-text . alt .

alt . :

```
<!-- Incorrect -->  
 An anonymous user wrote:  
<blockquote>Lorem ipsum dolor sed.</blockquote>  
<a href="https://google.com/"></a> /  
<a href="https://google.com/"></a>
```

avatar :

    Lorem ipsum dolor sed.

/

- `1`
- `""`

```
<!-- Correct -->
 An anonymous user wrote:
<blockquote>Lorem ipsum dolor sed.</blockquote>
<a href="https://google.com/"></a> /
<a href="https://google.com/"></a>
```

:

Lorem ipsum dolor sed.

/

<sup>1</sup> alt . alt ( . ). . alt .

## srcset

# srcset

```

```

sizes .

- 1200px 580px. 1200px .
- 640px 1200px 48 % (: ).
- 640px 98 % (: ). .

srcset , .

- img/hello-300.jpg 300px .
- img/hello-600.jpg 600px .
- img/hello-900.jpg 900px .
- img/hello-1200.jpg 1200 .

src .srcset srcset src .

# srcset



```

```

srcset x .

- - **1** img/hello-300.jpg
- **2** img/hello-600.jpg
- **3** img/hello-1200.jpg

src .srcset srcset src .

```
<picture>
  <source media="(min-width: 600px)" srcset="large_image.jpg">
  <source media="(min-width: 450px)" srcset="small_image.jpg">
  
</picture>
```

- 600px large\_image.jpg .
- 450 small\_image.jpg .
- default\_image.jpg .

: <https://riptutorial.com/ko/html/topic/587/>

# 27:

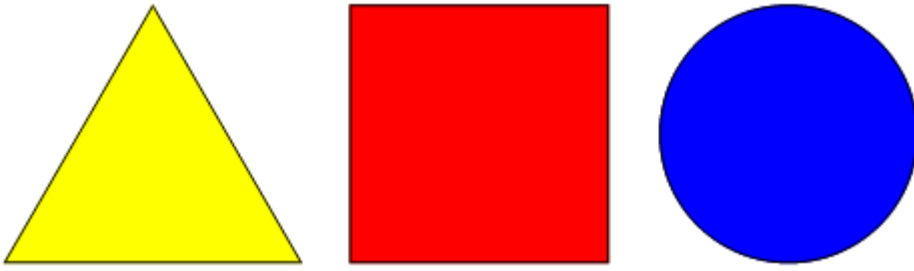
- `<img usemap="#[map-name]">`
- `<map name="[map-name]"></map>`
- `<area>`

|                           |                                                                                                                                                                                                                           |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <code>/</code>            |                                                                                                                                                                                                                           |
| <code>&lt;img&gt;</code>  | <code>&lt;img&gt;</code> . <code>&lt;img&gt;</code> .                                                                                                                                                                     |
| <code>usemap</code>       | <code>name name . , name="map" name="map" , usemap="#map" .</code>                                                                                                                                                        |
| <code>&lt;map&gt;</code>  |                                                                                                                                                                                                                           |
| <code>name</code>         | <code>. usemap .</code>                                                                                                                                                                                                   |
| <code>&lt;area&gt;</code> | <code>&lt;area&gt;</code> . <code>href</code> , <code>&lt;area&gt;</code> , <code>&lt;area&gt;</code> ( <code>&lt;a&gt;</code> ) ping . <a href="#">MDN</a> .                                                             |
| <code>alt</code>          | <code>. href &lt;area&gt; .</code>                                                                                                                                                                                        |
| <code>coords</code>       | <code>. shape="polygon" "x, y" (, shape="polygon" coords="x1, y1, x2, y2, x3, y3, ..." ).</code><br><code>shape="rectangle" , left, top, right, bottom . shape="circle" centerX, centerY,</code><br><code>radius .</code> |
| <code>href</code>         | <code>URL. , &lt;area&gt; .</code>                                                                                                                                                                                        |
| <code>shape</code>        | <code>&lt;area&gt;</code> . default ( <code>coords</code> ), circle circ , rectangle rect polygon poly .                                                                                                                  |

- MDN `<map>` `<area>` .
- GIMP ( ) . , .

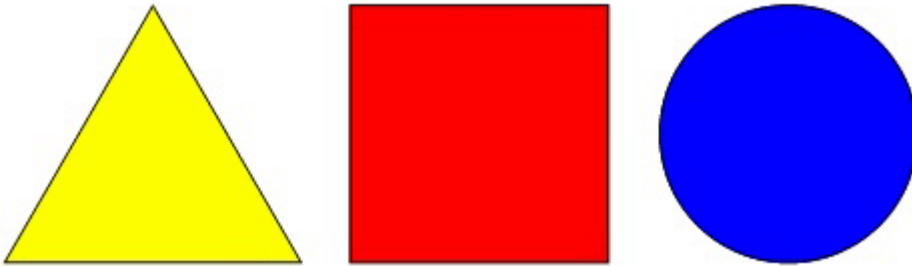
## Examples

```
<img> <map> <area> <map> . usemap name .
```



```
  
<map name="shapes">  
  <area shape="polygon" coords="79,6,5,134,153,134">  
  <area shape="rectangle" coords="177,6,306,134">  
  <area shape="circle" coords="397,71,65">  
</map>
```

. JSFiddle .



: <https://riptutorial.com/ko/html/topic/3819/>

# 28:

HTML .

- `<input type="" name="" value="">`

|                                                                                                                                                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| .                                                                                                                                                          |
| ID .                                                                                                                                                       |
| . hidden , text , tel , url , email , password , date , time , number , range , color , checkbox , radio , file , submit , image , reset button . text , . |
| .                                                                                                                                                          |
| .                                                                                                                                                          |
| type . .                                                                                                                                                   |
| HTML5 ( file email ).                                                                                                                                      |
| HTML5 . .                                                                                                                                                  |
| HTML5 .                                                                                                                                                    |
| . HTML5 : type hidden , range , color , checkbox , radio , file button .                                                                                   |
| HTML5 .                                                                                                                                                    |
| .                                                                                                                                                          |
| <input> .                                                                                                                                                  |
| <input> .                                                                                                                                                  |
| step . number , range , date , datetime-local , month , time week .                                                                                        |

HTML5 void `<input>` `<input />` . HTML5 .

HTML .

- button
- checkbox
- file
- hidden
- image
- password
- radio

- `reset`
- `submit`
- `text ()`

5

HTML 5 . . . text .

- `color`
- `date`
- `datetime ( )`
- `datetime-local`
- `email`
- `month`
- `number`
- `range`
- `search`
- `tel`
- `time`
- `url`
- `week`

[caniuse.com](http://caniuse.com) .

## Examples

HTML `<input>` HTML [HTML](#) .

type checkbox radio `<input>` .

```
<input type="checkbox">
<input type="radio">
```

. . . , . . . .  
 ( ) . name . . . , . . . name .

:

```
<input type="radio" name="color" id="red" value="#F00">
<input type="radio" name="color" id="green" value="#0F0">
<input type="radio" name="color" id="blue" value="#00F">
```

( ) ( ) ( ) .

---

:

**value**

value . on . value .

## checked

checked . .

.

```
<input checked>
<input checked="">
<input checked="checked">
<input checked="ChEcKeD">
```

checked checked .

```
<input type="radio">
<input type="checkbox">
```

<form> , checked .

. <label> . .

:

```
<label>
  <input type="radio" name="color" value="#F00">
  Red
</label>
```

for id <label>

```
<input type="checkbox" name="color" value="#F00" id="red">
<label for="red">Red</label>
```

.

<fieldset> <legend> .

:

```
<fieldset>
  <legend>Theme color:</legend>
  <p>
    <input type="radio" name="color" id="red" value="#F00">
    <label for="red">Red</label>
  </p>
  <p>
    <input type="radio" name="color" id="green" value="#0F0">
    <label for="green">Green</label>
  </p>
</p>
```

```
<input type="radio" name="color" id="blue" value="#00F">
<label for="blue">Blue</label>
</p>
</fieldset>
```

., . ( ). ( []). . . .

```
<input type="hidden" name="inputName" value="inputValue">
```

.

```
<input type="password" name="password">
```

password **type input** type=text .

```
<input type="password" name="password" placeholder="Password">
```

.

:

```
<input type="submit" value="Submit">
```

.

<button> .

```
<button type="submit">
 Submit
</button>
```

```
<input type="file" name="fileSubmission">
```

. form ( ).

file file upload\_file.php .

```
<form action="upload_file.php" method="post" enctype="multipart/form-data">
  Select file to upload:
  <input type="file" name="fileSubmission" id="fileSubmission">
  <input type="submit" value="Upload your file" name="submit">
</form>
```

multiple .

```
<input type="file" name="fileSubmission" id="fileSubmission" multiple>
```

. : .png , .gif , .jpeg .

```
<input type="file" name="fileSubmission" accept="image/x-png,image/gif,image/jpeg" />
```

HTML . . HTTP . (JavaScript ) .

email , url , tel , date .

5

required .

```
<input required>
```

/

minlength maxlength . .

```
<input minlength="3">  
<input maxlength="15">  
<input minlength="3" maxlength="15">
```

min max number range .

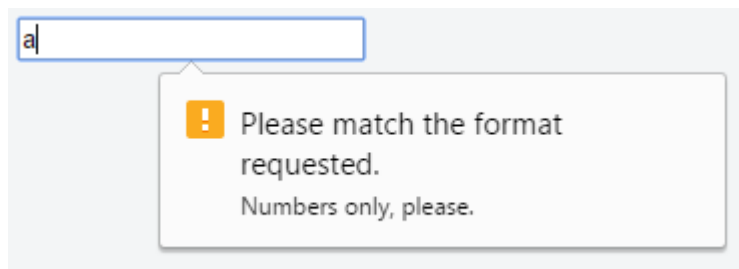
```
Marks: <input type="number" size="6" name="marks" min="0" max="100" />  
Subject Feedback: <input type="range" size="2" name="feedback" min="1" max="5" />
```

5

pattern . title .

```
<input pattern="\d*" title="Numbers only, please.">
```

Google 51 .



.



## 5

file ,,, . :

```
<input type="file" accept="image/*" title="Only images are allowed">
```

(:

```
<input type="file" accept="image/*,.rar,application/zip">
```

: form novalidate formnovalidate form . :

```
<form>
  <input type="text" name="name" required>
  <input type="email" name="email" required>
  <input pattern="\d*" name="number" required>

  <input type="submit" value="Publish"> <!-- form will be validated -->
  <input type="submit" value="Save" formnovalidate> <!-- form will NOT be validated -->
</form>
```

"" "" .

```
<input type="reset" value="Reset">
```

reset , .

- ( value ) .
- selected .
- checked .

: <form> form <form> . .

## 5

```
<input type="number" value="0" name="quantity">
```

number type Input .

. . ele-,0 .

```
<input type="tel" value="+8400000000">
```

tel type .

## 5

<input type="email"> .

```
<form>
  <label>E-mail: <label>
  <input type="email" name="email">
</form>
```

```
<input type="button" value="Button Text">
```

```
<button> .
```

```
<button type="button">Button Text</button>
```

"onclick" .

```
<input type="button" onclick="alert('hello world!')" value="Click Me">
```

```
<button type="button" onclick="alert('hello world!')">Click Me</button>
```

### [name]

name .

### [type]

type .

submit : . .

reset : .

button : . .

menu : .

### [value]

5

form

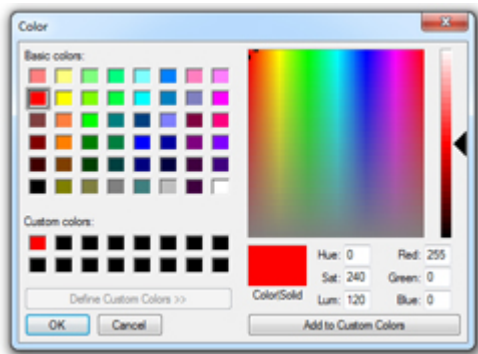
ID .  
( ).

|                |                          |
|----------------|--------------------------|
| formaction     | .                        |
| formenctype    | .<br>formmethod="post" . |
| formmethod     | HTTP (POST GET) .        |
| formnovalidate | .                        |
| formtarget     | .                        |

## 5

```
<input type="color" name="favcolor" value="#ff0000">
```

, color , color ( 16 ) .



type=text .

## URL

### 5

```
<input type="url" name="Homepage">
```

URL .

url .

url url ".com" .

5

```
<input type="date" />
```

. Firefox Internet Explorer .

## DateTime -

5

```
<input type="datetime-local" />
```

.

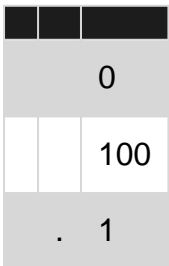
```
<input type="image" src="img.png" alt="image_name" height="50px" width="50px"/>
```

. src alt . height width .

5

```
<input type="range" min="" max="" step="" />
```

.



5

```
<input type="month" />
```

.

5

```
<input type="time" />
```

time . [RFC 3339](#) .

```
19:04:39
08:20:39.04
```

Android Edge, Chrome, Opera Chrome type = "time" . , 4.4 . iOS Safari , .

## 5

```
<input type="week" />
```

.

type . . . <input> <form> .

```
<input type="text">
```

( type )

```
<input>
```

20 . size .

```
<input type="text" size="50">
```

size CSS . ( , ) . size .

: size . .

. <textarea> .

## 5

. .

```
<input type="search" name="googlesearch">
```

## DateTime ()

" **datetime** " type input ( ) .

```
<fieldset>
  <p><label>Meeting time: <input type=datetime name="meeting.start"></label>
</fieldset>
```

:

- 
- 
- 
- 
- 
- 
- 
- 
- 
- 
- ( )
-

•

: <https://riptutorial.com/ko/html/topic/277/-->

# 29:

|                 |        |
|-----------------|--------|
| class           | . ID . |
| contenteditable | .      |
| contextmenu     | .      |
| dir             | .      |
| draggable       | .      |
| hidden          | .      |
| id              | . ID . |
| lang            | . .    |
| spellcheck      | / .    |
| style           | CSS .  |
| tabindex        | .      |
| title           | .      |
| translate       | .      |

## Examples

### Contenteditable

```
<p contenteditable>This is an editable paragraph.</p>
```

```
contenteditable . .
```

```
<p contenteditable>  
  This is an editable paragraph.  
  <span contenteditable="false">But not this.</span>  
</p>
```

: [https://riptutorial.com/ko/html/topic/2811/-](https://riptutorial.com/ko/html/topic/2811/)



---

# 30:

HTML .6 1 1 ,6 , . .

- `<h1>...</h1>`
- `<h2>...</h2>`
- `<h3>...</h3>`
- `<h4>...</h4>`
- `<h5>...</h5>`
- `<h6>...</h6>`
  
- h1 - h6 <sup>1</sup>
- h1 - h6 (CSS `:display: block`). <sup>2</sup>
- h1 - h6 section .
- ( h1 - h6 ) head .
- :
- CSS `font-size margin` . h1 - h6 CSS ( W3C " )
- ( ) (h1 h2 h3 ...) .

## Examples

`<h1>` `<h6>` . .

- `<h1>` .
- `<h6>` .

:

```
<h1>Heading 1</h1>
<h2>Heading 2</h2>
<h3>Heading 3</h3>
<h4>Heading 4</h4>
<h5>Heading 5</h5>
<h6>Heading 6</h6>
```



(:). .

h1 h2 ( ). h1 .

( ): .

```
<h1>Main title</h1>
<p>Introduction</p>

  <h2>Reasons</h2>

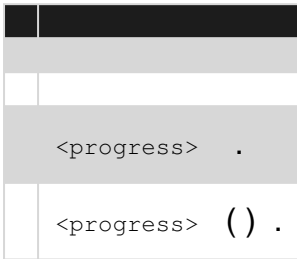
    <h3>Reason 1</h3>
    <p>Paragraph</p>

    <h3>Reason 2</h3>
    <p>Paragraph</p>

  <h2>In conclusion</h2>
  <p>Paragraph</p>
```

: <https://riptutorial.com/ko/html/topic/226/>

# 31:



<progress> Internet Explorer 10 .

<progress> . <progress> . <meter> .

## Examples

<progress> HTML5

```
<progress value="22" max="100"></progress>
```

22 %

progress[value] .

250px 20px .

```
progress[value] {  
  width: 250px;  
  height: 20px;  
}
```

## Chrome / Safari / Opera

-webkit-appearance . .

```
progress[value] {  
  -webkit-appearance: none;  
  appearance: none;  
}
```

```
progress[value]::-webkit-progress-bar {  
  background-color: "green";  
}
```

# Firefox

. . .

```
progress[value] {  
  -moz-appearance: none;  
  appearance: none;  
  border: none; /* Firefox also renders a border */  
}
```

Internet Explorer 10 `progress . background-color . color .`

```
progress[value] {  
  -webkit-appearance: none;  
  -moz-appearance: none;  
  appearance: none;  
  
  border: none; /* Remove border from Firefox */  
  
  width: 250px;  
  height: 20px;  
  
  color: blue;  
}
```

## HTML

`progress .`

```
<progress max="100" value="20">  
  <div class="progress-bar">  
    <span style="width: 20%;">Progress: 20%</span>  
  </div>  
</progress>
```

`progress div . div .`

: <https://riptutorial.com/ko/html/topic/5055/>

# 32:

|     |                                                   |
|-----|---------------------------------------------------|
|     | HTML5 . MDN .                                     |
|     | . , document.forms . .                            |
| ... | ID ( : <inputs id="inp1"> for value is "inp1" ) . |
|     | <form> . <form> , <form> <form> .                 |

## Examples

### For Form

<output> [for] [form] .. <output> **JavaScript** . JavaScript . <input> type="number" value . value parseInt() , parseFloat() , Number() value .

```
<!--form1 will collect the values of in1 and in2 on 'input' event.-->
<!--out1 value will be the sum of in1 and in2 values.-->

<form id="form1" name="form1" oninput="out1.value = parseInt(in1.value, 10) +
parseInt(in2.value, 10)">

  <fieldset>

    <legend>Output Example</legend>

    <input type="number" id="in1" name="in1" value="0">
    <br/>
    +
    <input type="number" id="in2" name="in2" value="0">

  </fieldset>

</form>

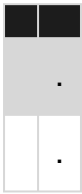
<!--[for] attribute enables out1 to display calculations for in1 and in2.-->
<!--[form] attribute designates form1 as the form owner of out1 even if it isn't a
descendant.-->

<output name="out1" for="in1 in2" form="form1">0</output>
```

```
<output name="out1" form="form1" for="inp1 inp2"></output>
```

: <https://riptutorial.com/ko/html/topic/723/>

# 33:



- Internet Explorer 9 . [caniuse.com](http://caniuse.com) .
- canvas JavaScript .

## Examples

canvas HTML5 .

```
<canvas id="myCanvas">
  Cannot display graphic. Canvas is not supported by your browser (IE<9)
</canvas>
```

300x150 HTML <canvas> .

'' ' .  
canvas 2D CanvasRenderingContext2D . HTMLCanvasElement Using .getContext("2d") :

```
var ctx = document.getElementById("myCanvas").getContext("2d");
// now we can refer to the canvas's 2D layer context using `ctx`

ctx.fillStyle = "#f00";
ctx.fillRect(0, 0, ctx.canvas.width, ctx.canvas.height); // x, y, width, height

ctx.fillStyle = "#000";
ctx.fillText("My red canvas with some black text", 24, 32); // text, x, y
```

## jsFiddle

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="utf-8" />
  <title>Draw two rectangles on the canvas</title>
  <style>
    canvas{
      border:1px solid gray;
    }
  </style>
  <script async>
    window.onload = init; // call init() once the window is completely loaded
    function init(){
      // #1 - get reference to <canvas> element
      var canvas = document.querySelector('canvas');

      // #2 - get reference to the drawing context and drawing API
```

```
var ctx = canvas.getContext('2d');

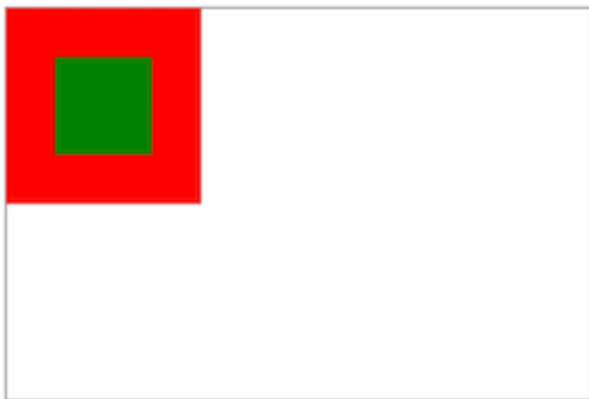
// #3 - all fill operations are now in red
ctx.fillStyle = 'red';

// #4 - fill a 100x100 rectangle at x=0,y=0
ctx.fillRect(0,0,100,100);

// #5 - all fill operations are now in green
ctx.fillStyle = 'green';

// #6 - fill a 50x50 rectangle at x=25,y=25
ctx.fillRect(25,25,50,50);

}
</script>
</head>
<body>
  <canvas width=300 height=200>Your browser does not support canvas.</canvas>
</body>
</html>
```



: <https://riptutorial.com/ko/html/topic/1162/>

# 34:

- `<pre>Formatted text</pre>`
- `<code>Inline Code</code>`

`code " "(HTML5) . . .`

- 
- / (, )
- 

`var .`

`samp .`

`kbd .`

## Examples

`(:HTML) code .`

```
<p>The <a> element creates a hyperlink.</p>
```

```
□
```

`(, , ) code pre .`

```
<pre>
  <code>
    x = 42
    if x == 42:
      print "x is ...      ... 42"
  </code>
</pre>
```

`(HTML < &lt; HTML ( )<p>This is a paragraph.</p> :)`

```
<pre>
  <code>
    &lt;p>This is a paragraph.&lt;/p>
  </code>
</pre>
```

[: https://riptutorial.com/ko/html/topic/1836/--](https://riptutorial.com/ko/html/topic/1836/--)



# 35:

, HTML . HTML Internet Explorer HTML . HTML .

- `<!-- Comment text -->`

`<!-- -->` . `(--)` `(:---> )`.

CSS . HTML .

HTML JavaScript CSS .

HTML , .

HTML . " " " " .

## Examples

HTML . `<!-- -->` :

```
<!-- I'm an HTML comment! -->
```

```
<h1>This part will be displayed <!-- while this will not be displayed -->.</h1>
```

```
<!-- This is a multiline HTML comment.  
Whatever is in here will not be rendered by the browser.  
You can "comment out" entire sections of HTML code.  
-->
```

HTML .

```
<h1 <!-- testAttribute="something" -->>This will not work</h1>
```

```
<h1 <!-- testAttribute="something" --> h1 HTML , > .
```

XML SGML HTML , -- .

## Internet Explorer

Microsoft Internet Explorer . , HTML , . Internet Explorer 5 9 . Internet Explorer IE "

HTML . Internet Explorer 5 9 . .

```

<!--[if IE]>
  Revealed in IE 5 through 9. Commented out and hidden in all other browsers.
<![endif]-->

<!--[if lt IE 8]>
  Revealed only in specified versions of IE 5-9 (here, IE less than 8).
<![endif]-->

<!--[if !IE]>
  Revealed in no browsers. Equivalent to a regular HTML comment.
<![endif]-->

<!--
  For purposes of comparison, this is a regular HTML comment.
-->

```

: . .

```

<!--[if IE]>-->
  The HTML inside this comment is revealed in IE 5-9, and in all other browsers.
<!--<![endif]-->

<!--[if IE 9]>-->
  This is revealed in specified versions of IE 5-9, and in all other browsers.
<!--<![endif]-->

<!--[if !IE]>-->
  This is not revealed in IE 5-9. It's still revealed in other browsers.
<!--<![endif]-->

```

( span a ) . ( ) ( ) .

```

<!-- Use an HTML comment to nullify the newline character below: -->
<a href="#">I hope there will be no extra whitespace after this!</a><!--
--><button>Foo</button>

```

. .

:

```

<!-- Use an HTML comment to nullify the newline character below: -->
<a href="#">I hope there will be no extra whitespace after this!</a><!--
--><button>Foo</button>
<hr>
<!-- Without it, you can notice a small formatting difference: -->
<a href="#">I hope there will be no extra whitespace after this!</a>
<button>Foo</button>

```

:

[I hope there will be no extra whitespace after this!](#)

[I hope there will be no extra whitespace after this!](#)

: <https://riptutorial.com/ko/html/topic/468/>

# 36:

- `<element lang="language_code"> <! - [ISO 639-1] ( https://en.wikipedia.org/wiki/ISO\_639-1 ) ->`

lang **BCP 47** ( ).

[BCP 47 IANA](#) .

WCAG 2.0 .

- [3.1.1](#)
- [3.1.2](#)

WCAG 2.0 .

- [H57 : html](#)
- [H58 :](#)

## Examples

lang .

```
<p lang="en">The content of this element is in English.</p>
```

```
<p lang="en" title="The value of this attribute is also in English.">The content of this element is in English.</p>
```

```
<div lang="en">
  <p>This element contains English content.</p>
  <p title="This attribute, too.">Same with this element.</p>
</div>
```

" " .

```
<p lang="en">This English sentence contains the German word <span lang="de">Hallo</span>.</p>
```

lang applet , base , basefont , br , frame , frameset , hr , iframe , meta , param , script (HTML 4.0)

" " .

```
<p lang="en" title="An English paragraph">
  <span lang="de" title="A German sentence">Hallo Welt!</span>
</p>
```

html .

```
<html lang="en">
```

lang (, ) .

" lang " lang .

## URL

<a> <area> hreflang . . BCP 47 [1] .

```
<p>  
<a href="example.org" hreflang="en">example.org</a> is one of IANA's example domains.  
</p>
```

---

1. ^ IETF : IETF, 2009 9 RFC 5646

: [https://riptutorial.com/ko/html/topic/737/-](https://riptutorial.com/ko/html/topic/737/)

# 37: ID

ID HTML . class CSS . ID ID . ID JavaScript CSS . HTML ID .

- class = "class1 class2 class3"
- id = "uniqueid"

|  |         |
|--|---------|
|  |         |
|  | ( ).    |
|  | ID ( ). |

- class id HTML .
- (AZ az) , , .
- HTML5 class id . HTML 4.0.1 <base> , <head> , <html> , <meta> , <param> , <script> , <style> <title> .
- . .
- ID ( , ) . ID .

## Examples

. class .

```
<div class="example-class"></div>
```

.

```
<div class="class1 class2"></div>
```

## CSS

. , span .

```
<span></span>
<span class="special"></span>
```

. CSS .

highlight .

```
<div class="highlight">Lorem ipsum</div>
<span class="highlight">Lorem ipsum</span>
```

CSS .

```
.highlight { color: green; }
```

highlight div .

```
div.highlight { color: green; }
```

**CSS** .highlight (:div.highlight) (: .highlight) .

.

```
.main .highlight { color: red; } /* Descendant combinator */  
.footer > .highlight { color: blue; } /* Child combinator */
```

. **HTML** :

```
<div class="special left menu">This text will be pink</div>
```

. **CSS** .

```
.special.left.menu { color: pink; }
```

## ID

ID . (anchor), (CSS) .

```
<div id="example-id"></div>
```

ID . .

```
<div id="example-id"></div>  
<span id="example-id"></span>
```

**CSS** JavaScript .

**CSS** ID ID # .

```
#example-id { color: green; }
```

ID URL # .

```
http://example.com/about#example-id
```

JavaScript CSS .

## ID

ID . HTML . . .

:

```
<div id="aDiv">a</div>
<div id="aDiv">b</div>
```

## CSS

```
#aDiv {
  color: red;
}
```

## JavaScript

```
var html = document.getElementById("aDiv").innerHTML;
```

```
html div ("a").
```

## 5

```
id .
```

- 1..
- 2..
- 3..

, , , . .

:

```
<div id="container"> ... </div>
<div id="999"> ... </div>
<div id="#%LV-||"> ... </div>
<div id="____v"> ... </div>
<div id="□□"> ... </div>
<div id="♥">... </div>
<div id="{}"> ... </div>
<div id="@"> ... </div>
<div id="⊙W⊙*~¥"> ... </div>
```

.

```
<div id=" "> ... </div>
```

.

```
<div id="results"> ... </div>
<div id="results"> ... </div>
```

## 4.01

```
id .
```



- (AZ / az)
- (0-9)
- ("-")
- ("\_")
- (":")
- (".")

## HTML5 .

```
<div id="container"> ... </div>
```

```
<div id="sampletext"> ... </div>
<div id="sample-text"> ... </div>
<div id="sample_text"> ... </div>
<div id="sample:text"> ... </div>
<div id="sample.text"> ... </div>
```

( ) .

id . class .

```
<div id="results"> ... </div>
<div id="results"> ... </div>
```

```
<div class="results"> ... </div>
<div class="results"> ... </div>
```

## : ID HTML

HTML .

id class , CSS, JavaScript .

id HTML5

```
<div id="9lions"> ... </div>
```

... CSS .

### 4.1.3

CSS ( , ID ) [a-zA-Z0-9] ISO 10646 U + 00A0 , (- \_); · ( )

---

## W3C

- [3.2.5.1 id](#)
- [3.2.5.7 class](#)
- [6.2 SGML](#)

ID : <https://riptutorial.com/ko/html/topic/586/--id>

---

## 38:

### Examples

ul li .

```
<ul>
  <li><a href="#">Home</a></li>
  <li><a href="#">About</a></li>
  <li><a href="#">Contact</a></li>
</ul>
```

### HTML5

HTML5 nav nav .

```
<nav>
  <a href="#">Home</a>
  <a href="#">About</a>
  <a href="#">Contact</a>
</nav>
```

: <https://riptutorial.com/ko/html/topic/10725/>

# 39:

|   |            |
|---|------------|
|   | .          |
| 0 | .          |
| . | : tabindex |

tabindex W3C 32767 .17.11.1 -1

0, tabindex .

## Examples

```
<div tabindex="0">Some button</div>
```

: HTML button a .

```
<button tabindex="-1">This button will not be reachable by tab</button>
```

( )

```
<div tabindex="2">Second</div>
<div tabindex="1">First</div>
```

. ( :tabindex="0" button a ) .

. DOM .

: <https://riptutorial.com/ko/html/topic/2594/>-

# 40:

HTML `<table>` 2 ( : , , , ) .

- `<table></table>`
- `<thead></thead>`
- `<tbody></tbody>`
- `<tfoot></tfoot>`
- `<tr></tr>`
- `<th></th>`
- `<td></td>`

. `<table>` / . , . . . . .

- `<table>` - / . `<table>` .
- `<caption>` - ( figure figcaption )
- `<col>` - ( )
- `<colgroup>` -
- `<thead>` - ( )
- `<tbody>` - / ( )
- `<tfoot>` - ( )
- `<tr>` -
- `<th>` -
- `<td>` -

. ( ) .

. `display: table` CSS `display: table` .

`<table>` HTML . Outlook Microsoft . IE , . HTML `<table>` / / .

## Examples

```

<table>
  <tr>
    <th>Heading 1/Column 1</th>
    <th>Heading 2/Column 2</th>
  </tr>
  <tr>
    <td>Row 1 Data Column 1</td>
    <td>Row 1 Data Column 2</td>
  </tr>
  <tr>
    <td>Row 2 Data Column 1</td>
    <td>Row 2 Data Column 2</td>
  </tr>
</table>

```

3 ( `<tr>` ) `<table>` . ( `<th>` ) ( `<td>` ) . `<th>` `<td>` . `<td>` `<th>` .



|       |       |
|-------|-------|
| 1 / 1 | 2 / 2 |
| 1 1   | 1 2   |
| 2 1   | 2 2   |

colspan rowspan . <th> <td> .

```
<table>
  <tr>
    <td>row 1 col 1</td>
    <td>row 1 col 2</td>
    <td>row 1 col 3</td>
  </tr>
  <tr>
    <td colspan="3">This second row spans all three columns</td>
  </tr>
  <tr>
    <td rowspan="2">This cell spans two rows</td>
    <td>row 3 col 2</td>
    <td>row 3 col 3</td>
  </tr>
  <tr>
    <td>row 4 col 2</td>
    <td>row 4 col 3</td>
  </tr>
</table>
```

|                                         |             |             |
|-----------------------------------------|-------------|-------------|
| row 1 col 1                             | row 1 col 2 | row 1 col 3 |
| This second row spans all three columns |             |             |
| This cell spans two rows                | row 3 col 2 | row 3 col 3 |
|                                         | row 4 col 2 | row 4 col 3 |

HTML .

rowspan = . 1.0 ( 0 ) ( <thead> , <tbody> <tfoot> ).

colspan = . 1.0 ( 0 ) <colgroup> .

### thead, tbody, tfoot caption

HTML <thead> , <tbody> , <tfoot> <caption> . CSS .

() <thead> .

. . .

```
<table>
  <caption>Table Title</caption> <!--| caption is the first child of table |-->
```

```

<thead> <!--=====| thead is after caption |-->
  <tr>
    <th>Header content 1</th>
    <th>Header content 2</th>
  </tr>
</thead>

<tbody> <!--=====| tbody is after thead |-->
  <tr>
    <td>Body content 1</td>
    <td>Body content 2</td>
  </tr>
</tbody>

<tfoot><!--| tfoot can be placed before or after tbody, but not in a group of tbody. |-->
<!--| Regardless where tfoot is in markup, it's rendered at the bottom. |-->

  <tr>
    <td>Footer content 1</td>
    <td>Footer content 2</td>
  </tr>
</tfoot>

</table>

```

. background-color , color border \* CSS border . .

| Table Title      |                  |
|------------------|------------------|
| Header content 1 | Header content 2 |
| Body content 1   | Body content 2   |
| Footer content 1 | Footer content 2 |

| Table Title      |                  |
|------------------|------------------|
| Header content 1 | Header content 2 |
| Body content 1   | Body content 2   |
| Footer content 1 | Footer content 2 |

| <caption> | . |
|-----------|---|
| <thead>   | . |
| <tbody>   | . |
| <tfoot>   | . |
| <th>      | . |
| <td>      | . |

. . <colgroup> <col> .

`<colgroup>` . `<colgroup>` `<table>` `<caption>` ( `<tr>` , `<thead>` , `<tbody>` ) .

```
<table>
  <colgroup span="2"></colgroup>
  <colgroup span="2"></colgroup>
  ...
</table>
```

`<col>` . `<col>` `<colgroup>` .

```
<table>
  <colgroup>
    <col id="MySpecialColumn" />
    <col />
  </colgroup>
  <colgroup>
    <col class="CoolColumn" />
    <col class="NeatColumn" span="2" />
  </colgroup>
  ...
</table>
```

**CSS** `<colgroup>` `<col>` .

- border
- background
- width
- visibility
- display ( display: none )

- display: none; .

**HTML5** .

th .

```
<table>
  <thead>
    <tr>
      <td></td>
      <th>Column Heading 1</th>
      <th>Column Heading 2</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <th>Row Heading 1</th>
      <td></td>
      <td></td>
    </tr>
    <tr>
      <th>Row Heading 2</th>
```



```
        <td></td>
        <td></td>
    </tr>
</tbody>
</table>
```

scope . :

```
<table>
  <thead>
    <tr>
      <td></td>
      <th scope="col">Column Heading 1</th>
      <th scope="col">Column Heading 2</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <th scope="row">Row Heading 1</th>
      <td></td>
      <td></td>
    </tr>
    <tr>
      <th scope="row">Row Heading 1</th>
      <td></td>
      <td></td>
    </tr>
  </tbody>
</table>
```

scope ., . .

- col
- row
- colgroup
- rowgroup

:

- <https://developer.mozilla.org/en-US/docs/Web/HTML/Element/th#attr-scope>
- <https://www.w3.org/TR/WCAG20-TECHS/H63.html>

: <https://riptutorial.com/ko/html/topic/274/>

# 41:

HTML HTML . , , , HTML .

- `<abbr>Abbreviation</abbr>`
- `<b>Bold Text</b>`
- `<del>Deleted Text</del>`
- `<em>Emphasized Text</em>`
- `<i>Italic Text</i>`
- `<ins>Inserted Text</ins>`
- `<mark>Marked (or Highlighted) Text</mark>`
- `<s>Stricken Text</s>`
- `<strong>Strong Text</strong>`
- `<sub>Subscript Text</sub>`
- `<sup>Superscript Text</sup>`
- `<u>Underlined Text</u>`

## Examples

,

`<strong>` `<b>` .

```
<strong>Bold Text Here</strong>
```

```
<b>Bold Text Here</b>
```

? . `<strong>` `<b>` .

`<b>` TTS (text-to-speech) . . `<strong>` .

`<em>` `<i>` .

```
<em>Italicized Text Here</em>
```

```
<i>Italicized Text Here</i>
```

? . `<em>` `<i>` .

, `<em>` : " "

`<i>` : " .

`<u>` HTML 4 , HTML 5 - - . .

```
<p>This paragraph contains some <u>mispelled</u> text.</p>
```

```
<mark> HTML5 " " .1
```

```
<p>Here is some content from an article that contains the <mark>searched query</mark> that we are looking for. Highlighting the text will make it easier for the user to find what they are looking for.</p>
```

Here is some content from an article that contains the **searched query** that we are looking for. Highlighting the text will make it easier for the user to find what they are looking for.

```
CSS .
```

```
<ins> .
```

```
<ins>New Text</ins>
```

```
<del> .
```

```
<del>Deleted Text</del>
```

```
<s> .
```

```
<s>Struck-through text here</s>
```

```
<sup> <sub> .
```

```
<sup>superscript here</sup>
```

```
<sub>subscript here</sub>
```

```
<abbr> .
```

```
<p>I like to write <abbr title="Hypertext Markup Language">HTML</abbr>!</p>
```

```
title .
```

: <https://riptutorial.com/ko/html/topic/526/-->

| S. No |                 | Contributors                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1     | HTML            | <a href="#">4444</a> , <a href="#">Abhishek Pandey</a> , <a href="#">aea2002</a> , <a href="#">ahmednawazbutt</a> , <a href="#">Alexander Wigmore</a> , <a href="#">Alexandre N.</a> , <a href="#">Amanda Ahn</a> , <a href="#">amflare</a> , <a href="#">Amitay Stern</a> , <a href="#">animuson</a> , <a href="#">Anthony Pham</a> , <a href="#">Boris</a> , <a href="#">bwegs</a> , <a href="#">Callan Heard</a> , <a href="#">ChrisD</a> , <a href="#">CocoaBean</a> , <a href="#">Community</a> , <a href="#">Dave Everitt</a> , <a href="#">Dinidu</a> , <a href="#">dippas</a> , <a href="#">dtyler</a> , <a href="#">duskwuff</a> , <a href="#">Eric Dobbs</a> , <a href="#">Firix</a> , <a href="#">FlyingPiMonster</a> , <a href="#">geek1011</a> , <a href="#">George Bailey</a> , <a href="#">Gerold Broser</a> , <a href="#">H Mirza</a> , <a href="#">H. Pauwelyn</a> , <a href="#">Harish Gyanani</a> , <a href="#">Hemant Kumar</a> , <a href="#">hillary.fraley</a> , <a href="#">Hudson Taylor</a> , <a href="#">ihavemorealts</a> , <a href="#">intboolstring</a> , <a href="#">Isak Combrinck</a> , <a href="#">Jeffrey Lin</a> , <a href="#">JHS</a> , <a href="#">jmmarco</a> , <a href="#">joe_young</a> , <a href="#">John Slegers</a> , <a href="#">Jon Chan</a> , <a href="#">JonasCz</a> , <a href="#">JPB</a> , <a href="#">kelvinelove</a> , <a href="#">Krii</a> , <a href="#">Kurniawantaari</a> , <a href="#">Lahiru Ashan</a> , <a href="#">Lambda Ninja</a> , <a href="#">Léo Martin</a> , <a href="#">Leonidas Menendez</a> , <a href="#">Malcolm</a> , <a href="#">Matt</a> , <a href="#">Matt</a> , <a href="#">MC93</a> , <a href="#">Michael Moriarty</a> , <a href="#">mnoronha</a> , <a href="#">Muntasir</a> , <a href="#">Nishchay</a> , <a href="#">Ortomala Lokni</a> , <a href="#">Persijn</a> , <a href="#">Prateek</a> , <a href="#">Pyloid</a> , <a href="#">Ryan Hilbert</a> , <a href="#">Shannon Young</a> , <a href="#">sideshowbarker</a> , <a href="#">stark</a> , <a href="#">Stelian Matei</a> , <a href="#">Sunny R Gupta</a> , <a href="#">the12</a> , <a href="#">tmg</a> , <a href="#">unor</a> , <a href="#">user3130333</a> , <a href="#">Valor Naram</a> , <a href="#">Willi</a> , <a href="#">Wolfgang</a> , <a href="#">Zaz</a> , <a href="#">zygimantus</a> , <a href="#">Zze</a> |
| 2     | CSS HTML        | <a href="#">animuson</a> , <a href="#">bdkopen</a> , <a href="#">Christian Ternus</a> , <a href="#">Community</a> , <a href="#">Euan Williams</a> , <a href="#">feeela</a> , <a href="#">Jones Joseph</a> , <a href="#">Michael Moriarty</a> , <a href="#">Thomas Gerot</a> , <a href="#">thouusten</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 3     | Div             | <a href="#">animuson</a> , <a href="#">Araknid</a> , <a href="#">Black Mamba</a> , <a href="#">Chris</a> , <a href="#">Content Solutions</a> , <a href="#">D M</a> , <a href="#">Faust</a> , <a href="#">feeela</a> , <a href="#">Gal Ratzkin</a> , <a href="#">JHS</a> , <a href="#">MySpeed</a> , <a href="#">S.L. Barth</a> , <a href="#">SuperStormer</a> , <a href="#">Thomas Gerot</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 4     | Doctypes        | <a href="#">Akshay Anand</a> , <a href="#">Al.G.</a> , <a href="#">Angelos Chalaris</a> , <a href="#">Ani Menon</a> , <a href="#">animuson</a> , <a href="#">Chris</a> , <a href="#">Content Solutions</a> , <a href="#">heerfk</a> , <a href="#">mnoronha</a> , <a href="#">pinjasaur</a> , <a href="#">Right leg</a> , <a href="#">Sumner Evans</a> , <a href="#">Thomas Gerot</a> , <a href="#">tmg</a> , <a href="#">unor</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 5     | HTML 5          | <a href="#">Farhad</a> , <a href="#">TricksfortheWeb</a> , <a href="#">Valor Naram</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 6     | HTML            | <a href="#">Paresh Maghodiya</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 7     | HTML JavaScript | <a href="#">Alexandre N.</a> , <a href="#">andreaem</a> , <a href="#">animuson</a> , <a href="#">Anselm Urban</a> , <a href="#">Charles</a> , <a href="#">Marjorie Pickard</a> , <a href="#">MervS</a> , <a href="#">Roko C. Buljan</a> , <a href="#">Sildoreth</a> , <a href="#">SuperStormer</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 8     | IFrame          | <a href="#">Adjit</a> , <a href="#">Alexandre N.</a> , <a href="#">animuson</a> , <a href="#">ChrisD</a> , <a href="#">dorukayhan</a> , <a href="#">Duh-Wayne-101</a> , <a href="#">Emanuel Vintilă</a> , <a href="#">J F</a> , <a href="#">Ojen</a> , <a href="#">Wojciech Kazior</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 9     | SVG             | <a href="#">andreas</a> , <a href="#">Black Mamba</a> , <a href="#">ChrisD</a> , <a href="#">HerrSerker</a> , <a href="#">Patrickdev</a> , <a href="#">Timothy Miller</a> , <a href="#">w5m</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 10    |                 | <a href="#">4444</a> , <a href="#">ChrisD</a> , <a href="#">Thomas Gerot</a> , <a href="#">unor</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

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| 11 | animuson, BiscuitBaker, Daniel Käfer, Grace Note, H. Pauwelyn, Jon Ericson, kcpike, Marvin, Matas Vaitkevicius, platy11, Prateek, Pseudonym Patel, Richard Hamilton, Right leg, Sayakiss, Stewartside, Thomas Gerot, tmg, Tom Johnson, unor, Zack                                                                                                                                                                                                                                                                  |
| 12 | Alexandre N.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 13 | Abrar Jahin, Thomas Gerot, Valor Naram                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 14 | Andrew Brooke, Anil, animuson, Hanif Formoly, nalply, Shannon Young, SuperBiasedMan, SuperStormer, Yossi Aharon                                                                                                                                                                                                                                                                                                                                                                                                    |
| 15 | animuson, Community, Faegy, Infuzed guy, James Donnelly, Manish, Nathan Tuggy, Nhan, Racil Hilan, rajarshig, swatchai, unor, Yasir T                                                                                                                                                                                                                                                                                                                                                                               |
| 16 | Anthony Pham, fredden, Josiah Keller, m_callens, Roko C. Buljan                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 17 | AA2992, animuson, Anselm Urban, Aravind Suresh, Callan Heard, Chris Rutherford, cone56, DawnPaladin, Domenic, feeela, Henrique Barcelos, Infuzed guy, JHS, Lambda Ninja, Matas Vaitkevicius, Nhan, Thomas Gerot, unor, V4karian, vladdobra                                                                                                                                                                                                                                                                         |
| 18 | Content Solutions, mnoronha, unor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 19 | Abhishek Pandey, Akshit Soota, Alexander Wigmore, Angelos Chalaris, Ani Menon, animuson, Anselm Urban, Bálint, bdkopen, Bookeater, Boris, coliff, Domenic, geek1011, Habel Philip, Hafidz Ilham Aji Permana, Himanshu Vaghela, insertusernamehere, jhoanna, JHS, kelvinelove, m_callens, Matt S, Michael Moriarty, Mr. Alien, Nishchay, Ortomala Lokni, Peter O., Safoor Safdar, Senjuti Mahapatra, Shannon Young, Stas Christiansen, Stephen Leppik, Ted Goas, Thomas Gerot, timmyRS, tmg, unor, VatsalSura, xims |
| 20 | animuson, MervS, stack-learner                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 21 | feeela, Isak Combrinck, LisaMM, Shiva, Yossi Aharon                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 22 | Ali Almoullim, amflare, animuson, GentlePurpleRain, Ilyas karim, Mosh Feu, Tot Zam                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 23 | Bhavya Singh, Paul Sweatte, Shannon Young, Travis, unor, user30796                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 24 | Al.G., animuson, Anselm Urban, Anthony Pham, ban17, DawnPaladin, Emil, FlyingPiMonster, insertusernamehere, J F,                                                                                                                                                                                                                                                                                                                                                                                                   |

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|    | JHS, joe_young, Jojodmo, Jones Joseph, Lambda Ninja, Matas Vaitkevicius, Nathan Tuggy, Pranav, Prateek, Raystafarian, Robert Columbia, Squidward, Steyn van Esveld, Thomas Gerot, unor, Wolfgang                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 25 | Ali Almoullim, Ani Menon, animuson, Aown Muhammad, Chris Rutherford, Cullub, Gabriel Chi Hong Lee, Greg T, j08691, Kimmax, Luca langella, Niek Brouwer, Thomas Gerot                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 26 | Alex, Alexandre N., andreaem, animuson, Boysenb3rry, Caleb Kleveter, Gabriel Chi Hong Lee, Infuzed guy, ivn, Kake_Fisk, Maximillian Laumeister, Mohd Samir Khan, Mr Lister, Nhan, Shivangi Chaurasia, Stephen Leppik, Wolfgang                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 27 | animuson, Lambda Ninja, RamenChef                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 28 | Abhishek Pandey, Al.G., Alohci, amflare, Amitay Stern, Angelos Chalaris, Ani Menon, animuson, bhansa, Bob, Charlie H, Christophe Strobbe, CN, Community, cone56, Daniel, DawnPaladin, Dipen Shah, Domenic, Druzion, Edvin Tenovimas, Epodax, Franck Dernoncourt, gabe3886, geeksal, H. Pauwelyn, Henrique Barcelos, Huy Nguyen, J F, John Slegers, Kashyap Jha, Lahiru Ashan, Lankymart, Magisch, Marvin, Matas Vaitkevicius, Matt, Maximillian Laumeister, Mike McCaughan, morewry, Mosh Feu, Nathan Arthur, Nil Llisterri, Nishchay, niyasc, NoobCoder, Optimiser, Ortomala Lokni, Pi Programs, Pimgd, Prateek, Prav, Praveen Kumar, Psaniko, QoP, RamenChef, Ranjit Singh, Richard Hamilton, Robert Columbia, Roko C. Buljan, SeinopSys, Sharavnan Kv, Shivangi Chaurasia, SJDS, Squazz, Stephen Leppik, Stewartside, Sunny R Gupta, sv3k, the12, think123, Thomas Gerot, Timon, tmg, Tot Zam, trungk18, Undo, vladdobra, zzzzBov |
| 29 | animuson, Becca, unor, Zange-chan                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 30 | Ani Menon, animuson, dippas, Evan, Infuzed guy, joe_young, MervS, Nathan Arthur, Pseudonym Patel, sasha, Thomas Gerot, unor, V-Kopio                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 31 | animuson, Content Solutions, Richard Hamilton                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 32 | J F, Stephen Leppik, zer00ne                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 33 | cone56, Richard Hamilton, Roko C. Buljan, tonethar, Trevor Clarke, user4040648                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 34 | 4444, Naveen Gogineni, Shannon Young, SuperStormer, Tot Zam, unor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

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| 35 |    | Ani Menon, animuson, Ashwin Ramaswami, bdkopen, ChrisD, Epodax, JHS, jkdev, RamenChef, Robert Grant, Soaring Code, Squazz, Thomas Gerot, Ulrich Schwarz, Wolfgang                                                                                                                                         |
| 36 |    | animuson, FelipeAls, Gerold Broser, Isak Combrinck, Muntasir, Shannon Young, unor                                                                                                                                                                                                                         |
| 37 | ID | Angelos Chalaris, animuson, brandaemon, Caleb Kleveter, Community, Duh-Wayne-101, Emil, Epodax, Evan, GoatsWearHats, Ingrid Stevens, jhnance, JHS, John Slegers, lexith, Luca Putzu, Michael_B, Natalie, Nhan, Richard Hamilton, Simone Carletti, Thomas Gerot, Timothy, Tyler Zika, unor, Wolfgang, xims |
| 38 |    | Community                                                                                                                                                                                                                                                                                                 |
| 39 |    | Content Solutions, Psaniko                                                                                                                                                                                                                                                                                |
| 40 |    | albert, Alexandre N., animuson, Cedric Zoppolo, Eduardo Molteni, Grant Palin, J F, j08691, JHS, joe_young, Lambda Ninja, Mottie, Mr Lister, Nijin22, Prateek, PrAtik Lochawala, Praveen Kumar, Sildoreth, svarog, Ted Goas, tehciolo, Thomas Landauer, zer00ne                                            |
| 41 |    | animuson, Ben Rhys-Lewis, Emil, gustavohenke, J F, Matas Vaitkevicius, Peter L., Raystafarian, Stephen Leppik, Thomas Gerot, unor, Wolfgang                                                                                                                                                               |