Attribute selectors

In this lesson we'll meet the attribute selectors.
Let's begin!

WE'LL COVER THE FOLLOWING

CSS provides selectors to format a tag based on any HTML attributes it has. Maybe, you want to style links according to the pages they point to or set a border around highlighted images. This extra information used to set up the appropriate styles can be based on attribute values. Attribute selectors can be specified with one of the following expressions:

```
selector[attr]
selector[attr operator "value"]
```

In this notation, the selector identifies any selector (tag, class, ID, or other), `attr` names the attribute that should be compared to the specified value.

If only the `attr` tag is specified, the selector matches with all tags within the selector that have an attribute named `attr`. If an operator is specified, the attribute is checked against the value, as described in the table below:

Attribute selector checks

Operator	Test
=	The attribute's value is exactly the one specified in the expression
^=	The attribute's value begins with the one specified in the expression
$=	The attribute's value ends with the one specified in the expression
*=	The attribute's value contains the one specified in the expression
~=	The attribute's value contains the word in the specified expression

Listing 9-4 demonstrates all attribute selectors. It defines a page with five links and four paragraphs, and a number of style rules with various attribute selectors.

Listing 9-4: Attribute selectors in action

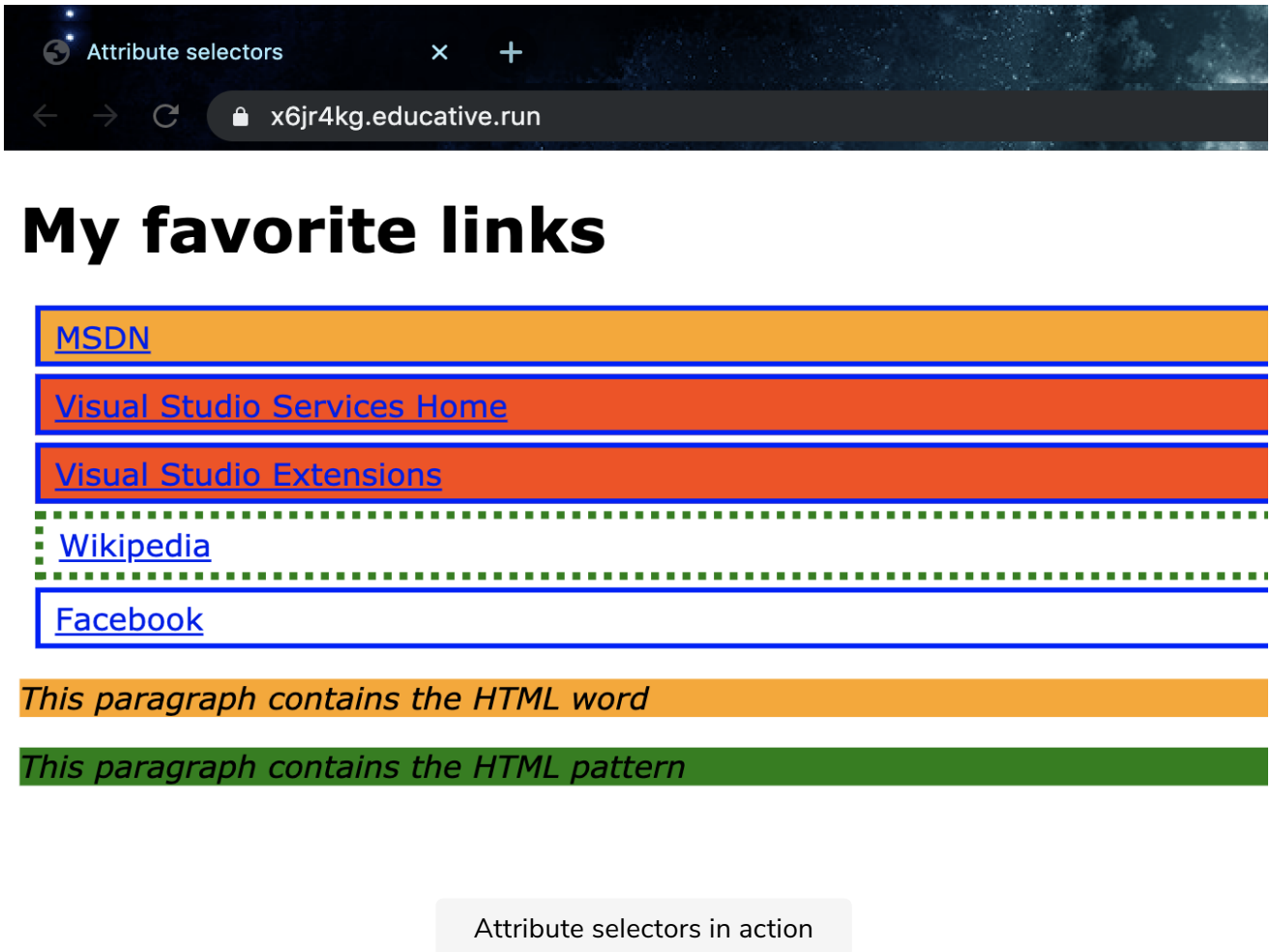
```
<!DOCTYPE html>
<html>
<head>
  <title>Attribute selectors</title>
  <style>
    body {
      font-family: Verdana, Helvetica, sans-serif;
    }

    a {
      display: block;
      margin: 4px 8px;
      padding: 4px 8px;
    }
    a[href= "http://msdn.com"] {
      background-color: orange;
    }
    a[href^= "http://v"] {
      background-color: orangered;
    }
    a[href$=".com"] { border: 2px solid blue; }
    a[href*="iki"] { border: 4px dotted green; }
    p[title] { font-style: italic; }
    p[title*="HTML"] { background-color: green; }
    .par[title~="HTML"] { background-color: orange; }
  </style>
</head>
<body>
```

```
  <h1>My favorite links</h1>
  <a href="http://msdn.com">MSDN</a>
  <a href="http://visualstudio.com">

    Visual Studio Services Home
  </a>
  <a href="http://visualstudiogallery.com">
    Visual Studio Extensions
  </a>
  <a href="http://wikipedia.org">
    Wikipedia
  </a>
  <a href="http://facebook.com">
    Facebook
  </a>
  <p title="This is HTML" class="par">
    This paragraph contains the HTML word
  </p>
  <p title="SomewhereHTMLIsHere" class="par">
    This paragraph contains the HTML pattern
  </p>
</body>
</html>
```

The page is displayed as shown below:



Attribute selectors in action

The `"a"` rule is applied for all `<a>` tags. The `a[href="http://msdn.com"]` selector matches with all `<a>` tags that have an `href` attribute with the exact value of `"http://msdn.com"`. There is only one, the first link, so its background

is set to orange. The `a[href^="http://v"]` selector applies to those `<a>` tags,

which have an `href` that begins with `“http://v”`. As a result, the two Visual Studio links get an orange-red shading.

In contrast to this, `a[href$=".com"]` marks those links that end with “.com”, and this is why all `<a>` tags except Wikipedia have a solid blue border. The Wikipedia link does not remain without a border, because it matches the `a[href*="iki"]` selector. Its href contains `“iki”`. The `p[title]` rule applies to all `<p>` tags that have a title attribute, so both paragraphs are displayed with italicized text. The `p[title*="HTML"]` rule matches both paragraphs, as they contain the `“HTML”` string in their title, so this rule sets their background to green. However, the first paragraph has an orange background.

How could it be?

The first paragraph matches with the `.par[title~="HTML"]` selector, because it has a class attribute with value `“par”`, and contains the `“HTML”` word. The second paragraph contains HTML, but not as a separate word, and it does not have a class attribute. So, there are two matching selectors for the first paragraph, `p[title*="HTML"]` and `.par[title~="HTML"]`, and both intend to set the background color.

The second selector wins, because it extends a class selector (`.par`), while the first extends a tag selector (`p`), and the class selector is more specific. The cascading results in the orange shading.

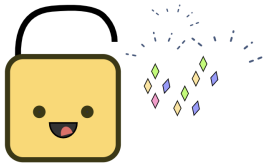
You can apply multiple attribute selectors to a tag to extend an existing attribute selector with a new one, such as this:

```
a[href$=".com"][href^="https://"]
```

This rule applies to all HTTPS links that point to an URL ending with “.com”.

Achievement unlocked!

Congratulations! You’ve learned to make use of attribute selectors in CSS!



Good job! Give yourself a round of applause!

In the *next lesson*, let's go onto meet group and universal selectors.