Front End Technologies CSS - Day 14
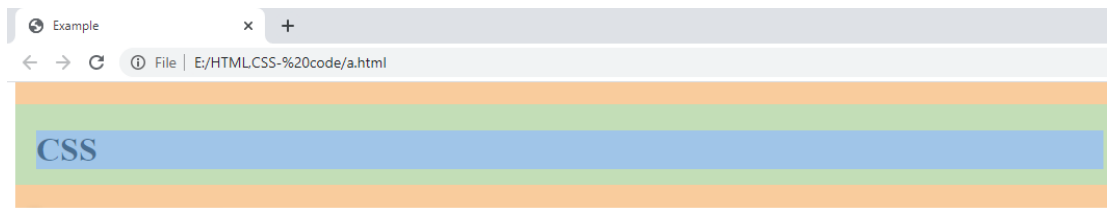
Agenda

- **CSS Box Model Continued**

Padding in CSS: The CSS padding properties are used to generate space around an element's content. Let's understand this with an example.

Example:

Index.html:

```html
<!DOCTYPE html>
<html>
<head>
    <title>Example</title>
    <style type="text/css">
        h1{
            padding-top: 25px;
            padding-right: 10px;
            padding-bottom: 15px;
            padding-left: 20px;
        }
    </style>
</head>
<body>
    <h1>CSS</h1>
</body>
</html>
```
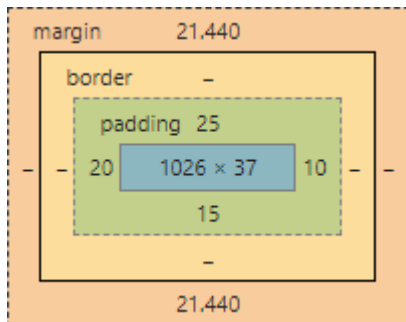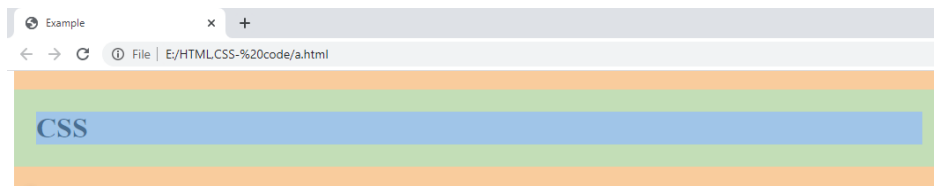
Output:

Box Model:

Here, if you observe the output padding is applied around the region of content i.e padding-top is 25px, padding-right is 10px, padding-bottom is 15px and padding-left is 10px. Instead of writing padding-top, padding-right, padding-bottom and padding-left you can simply write it as padding and mention all four dimensions as shown below.

index.html:

```html
<!DOCTYPE html>
<html>
<head>
    <title>Example</title>
    <style type="text/css">
        h1{
            padding: 25px 25px 25px 25px;

        }
    </style>
</head>
<body>
    <h1>CSS</h1>
</body>
</html>
```
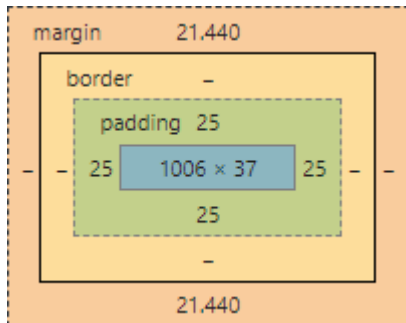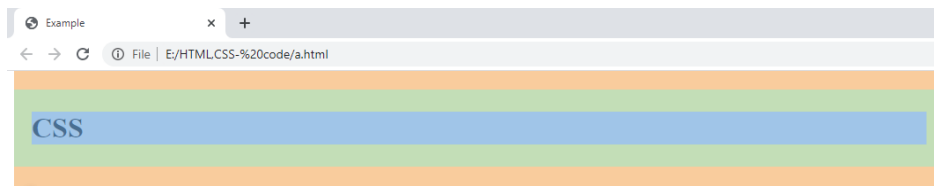
Output:

Box model:

If you specify only one dimension which will be padding-top then remaining three will also have same padding value. if you specify 2 dimensions which will padding-top and padding-right then, dimensions specified to padding-top will be copied to padding-bottom and dimensions specified to padding-right will be copied to padding-left as shown below.
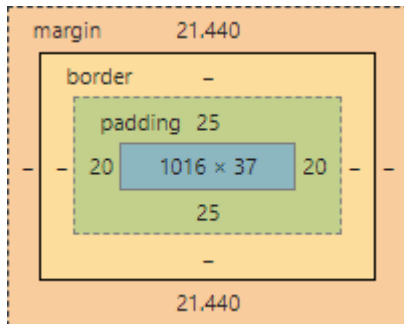
index.html

```html
<!DOCTYPE html>
<html>
<head>
    <title>Example</title>
    <style type="text/css">
        h1{
            padding: 25px 20px;

        }
    </style>
</head>
<body>
    <h1>CSS</h1>
</body>
</html>
```

Output:

Box Model:

As you can clearly see in the boc model dimensions specified for padding-top gets reflected to padding-bottom and dimensions specified for padding-right gets reflected to padding-left.

Example: padding property has 3values.

index.html

```html
<!DOCTYPE html>
<html>
<head>
    <title>Example</title>
    <style type="text/css">
        h1{
            padding: 25px 20px 50px;

        }
    </style>
</head>
<body>
    <h1>CSS</h1>
</body>
</html>
```
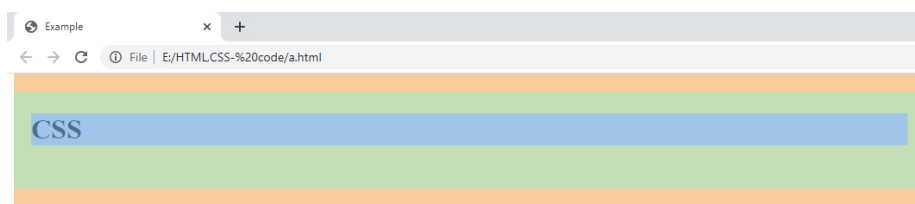
Output:

Box Model:

In this example, dimensions for padding-left is not specified so dimensions given to padding-right will be copied to padding-left.

Example: To design the table shown below.

	Java	C	Python
Ram	Yes	Yes	No
Mike	Yes	Yes	Yes
Jhon	Yes	No	No

index.html

```html
<!DOCTYPE html>
<html>
<head>
    <title>Example</title>
    <style type="text/css">
        td{
            padding: 5px;
        }
    </style>
</head>
<body>
    <table border="2px">
        <tr>
        <th>

        </th>
        <th>
            Java
        </th>
        <th>
            C
        </th>
        <th>
            Python
        </th>
    </tr>
```
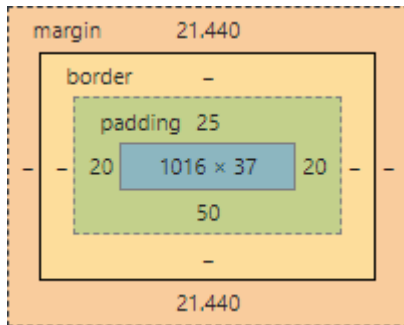
```html
    <tr>
        <td>
            Ram
        </td>
        <td>
            Yes
        </td>
        <td>
            Yes
        </td>
        <td>
            No
        </td>
    </tr>
    <tr>
        <td>
            Mike
        </td>
        <td>
            Yes
        </td>
        <td>
            Yes
        </td>
        <td>
            Yes
        </td>
    </tr>
```

```html
    <tr>
        <td>
            Jhon
        </td>
        <td>
            Yes
        </td>
        <td>
            No
        </td>
        <td>
            No
        </td>
    </tr>
    </table>
</body>
</html>
```
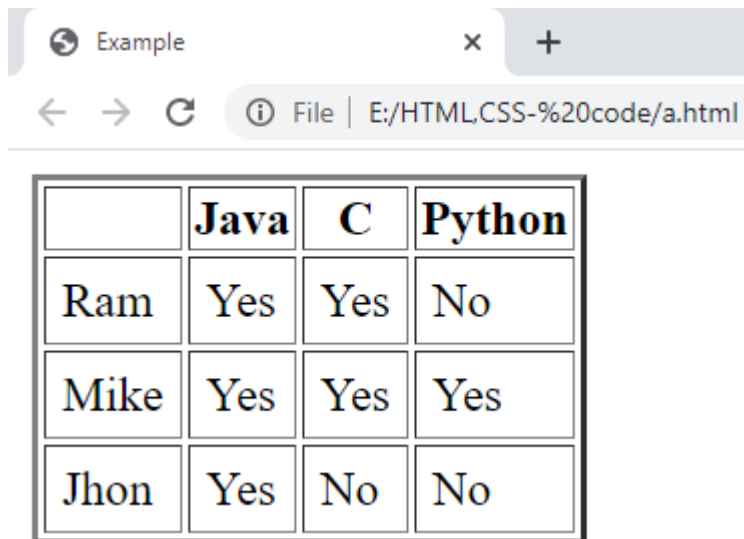
Output:

	Java	C	Python
Ram	Yes	Yes	No
Mike	Yes	Yes	Yes
Jhon	Yes	No	No

Box Model:

border	1	
padding 5		
1 5	24 × 17.333	5 1
	5	
	1	

In this example, by using border properties we have added border to the table and padding is applied to each data present in the table. If you observe the last column present inside the table it is not center aligned, to make it center aligned padding-left value should be increased as shown below.

index.html:

```html
<!DOCTYPE html>
<html>
<head>
    <title>Example</title>
    <style type="text/css">
        td{
            padding: 5px;
        }

        tr td:last-child{
            padding-left: 12px;
        }
    </style>
</head>
<body>
    <table border="2px">
        <tr>
        <th>

        </th>
        <th>
            Java
        </th>
        <th>
            C
        </th>
        <th>
            Python
        </th>
    </tr>
        <tr>
            <td>
                Ram
            </td>
            <td>
                Yes
            </td>
            <td>
                Yes
            </td>
            <td>
                No
            </td>
        </tr>
        <tr>
            <td>
                Mike
            </td>
            <td>
                Yes
            </td>
            <td>
                Yes
            </td>
            <td>
                Yes
            </td>
        </tr>
        <tr>
            <td>
                Jhon
            </td>
            <td>
                Yes
            </td>
            <td>
                No
            </td>
            <td>
                No
            </td>
        </tr>
        </table>
</body>
</html>
```
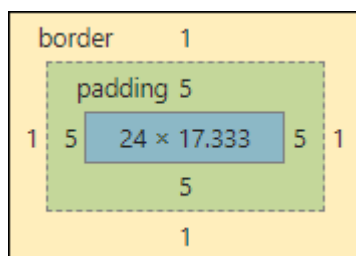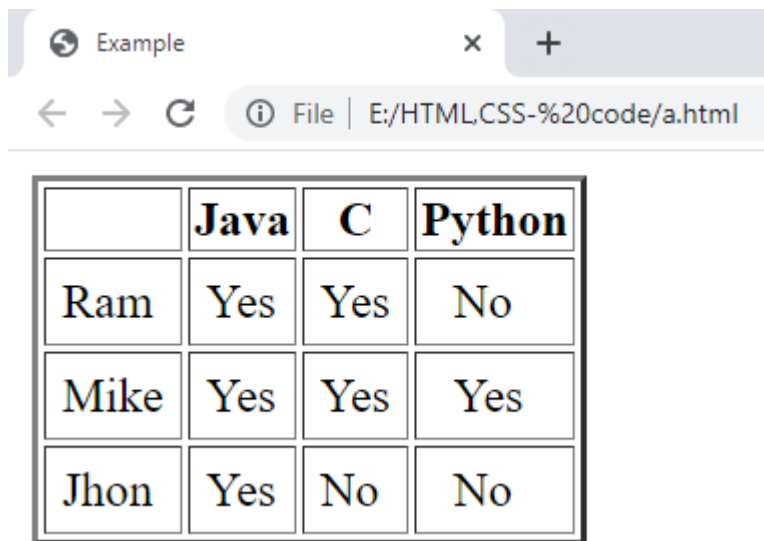
Output:

	Java	C	Python
Ram	Yes	Yes	No
Mike	Yes	Yes	Yes
Jhon	Yes	No	No

Border in css: The border properties allow you to specify how the border of the box representing an element should look. There are three properties of a border you can change −

- The **border-color** specifies the color of a border.

- The **border-style** specifies whether a border should be solid, dashed line, double line, or one of the other possible values.

- The **border-width** specifies the width of a border.

Let us now understand border with an example.

index.html:

```html
<!DOCTYPE html>
<html>
<head>
    <style type="text/css">
        p{
            padding: 5px;
            border-width: 3px;
            border-style: solid;
            border-color: red;
        }
    </style>
</head>

<body>
    <p>This is front-end development</p>
</body>

</html>
```
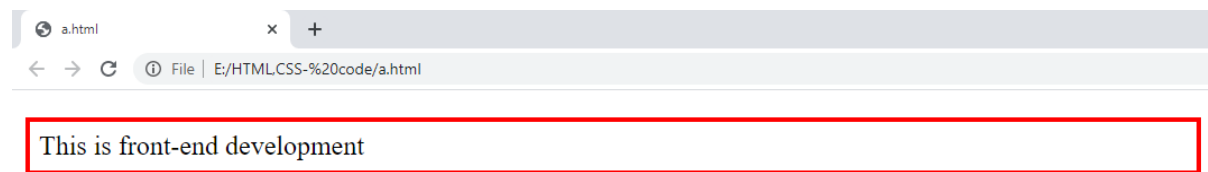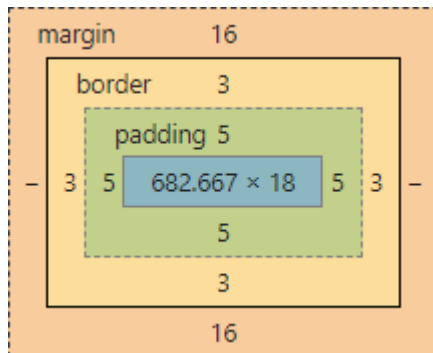
Output:

This is front-end development

Box Model:

In this example, padding and border is applied for the given content is shown above. Here, padding is 5px, border-width is 3px, border-style is solid and border-color is red. Instead of specifying border-width, border-style and border-color you can make use of shorthand property. When using shorthand property the order should be border-width, border-style and border-color as shown below.

index.html

```html
<!DOCTYPE html>
<html>
<head>
    <style type="text/css">
        p{
            padding: 5px;
            border: 3px solid blue;
        }
    </style>
</head>

<body>
    <p>This is front-end development</p>
</body>

</html>
```

Output:

a.html	×	+

← → C ⓘ File | E:/HTML.CSS-%20code/a.html

This is front-end development

Different border-style in css:

- **dotted** - Defines a dotted border
- **dashed** - Defines a dashed border
- **solid** - Defines a solid border
- **double** - Defines a double border
- **groove** - Defines a 3D grooved border. The effect depends on the border-color value
- **ridge** - Defines a 3D ridged border. The effect depends on the border-color value
- **inset** - Defines a 3D inset border. The effect depends on the border-color value
- **outset** - Defines a 3D outset border. The effect depends on the border-color value
- **none** - Defines no border
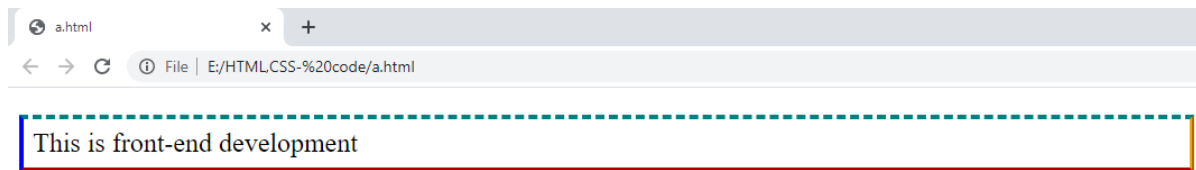- **hidden** - Defines a hidden border

In the above example all side of the border have same styling, but certainly you can give different border-style for all the sides as shown below.

index.html

```html
<!DOCTYPE html>
<html>
<head>
    <style type="text/css">
        p{
            padding: 5px;
            border-top: 3px dashed teal;
            border-right: 3px ridge orange;
            border-bottom: 3px outset red;
            border-left: 3px solid blue;
        }
    </style>
</head>

<body>
    <p>This is front-end development</p>
</body>

</html>
```

Output:

This is front-end development

Till now you have seen rectangular border, now we will see how to put rounded-border.

Example:

Index.html

```html
<!DOCTYPE html>
<html>
<head>
    <style type="text/css">
        p{
            padding: 5px;
            border-top: 3px dashed teal;
            border-right: 3px ridge orange;
            border-bottom: 3px outset red;
            border-left: 3px solid blue;
            border-top-right-radius: 5px;
            border-top-left-radius: 5px;
            border-bottom-right-radius: 5px;
            border-bottom-left-radius: 5px;
        }
    </style>
</head>

<body>
    <p>This is front-end development</p>
</body>

</html>
```

Output:

This is front-end development

Instead of writing border-top-right-radius, border-top-left-radius, border-bottom-right-radius and border-bottom-left-radius you can use shorthand border-radius as shown below.

index.html:

```html
<!DOCTYPE html>
<html>
<head>
    <style type="text/css">
        p{
            padding: 5px;
            border-top: 3px dashed teal;
            border-right: 3px ridge orange;
            border-bottom: 3px outset red;
            border-left: 3px solid blue;
            border-radius: 40px 40px 40px 40px;
        }
    </style>
</head>

<body>
    <p>This is front-end development</p>
</body>

</html>
```

Output: