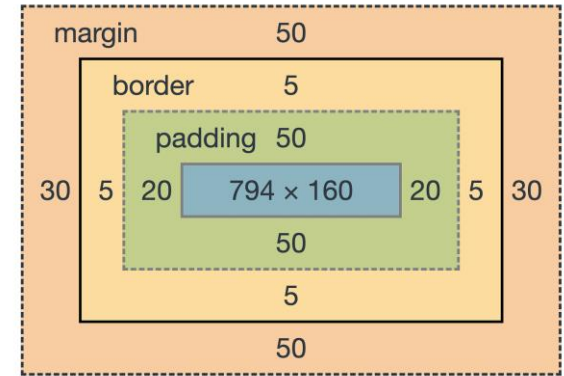


# CSS Box Model



All HTML elements can be considered as boxes.

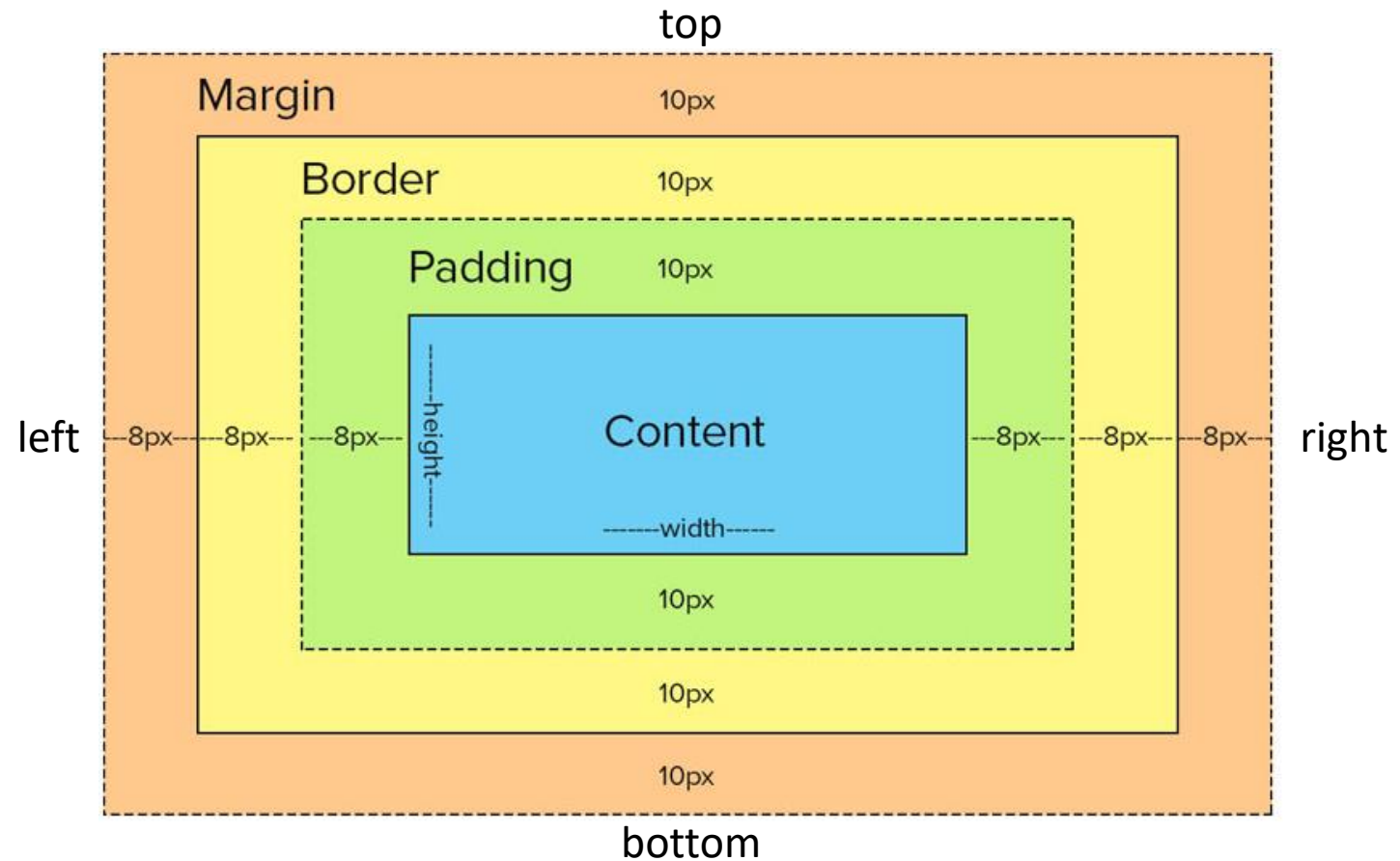
In CSS, the term "box model" is used when talking about **design** and **layout**.

The CSS box model is essentially a box that wraps around every HTML element.

It consists of:

- margins
- borders
- padding, and
- the actual content.

## Parts of a box :



- **Content** - The content of the box, where text and images appear
- **Padding** - Clears an area around the content. The padding is transparent
- **Border** - A border that goes around the padding and content
- **Margin** - Clears an area outside the border. The margin is transparent

# < example1 />

Create a div HTML element

```
<div>
```

Hello, this an example of the Box Model.

```
</div>
```

and assign it the next attributes : margin, border and padding :

```
margin: 50px;
```

```
border: 12px solid green;
```

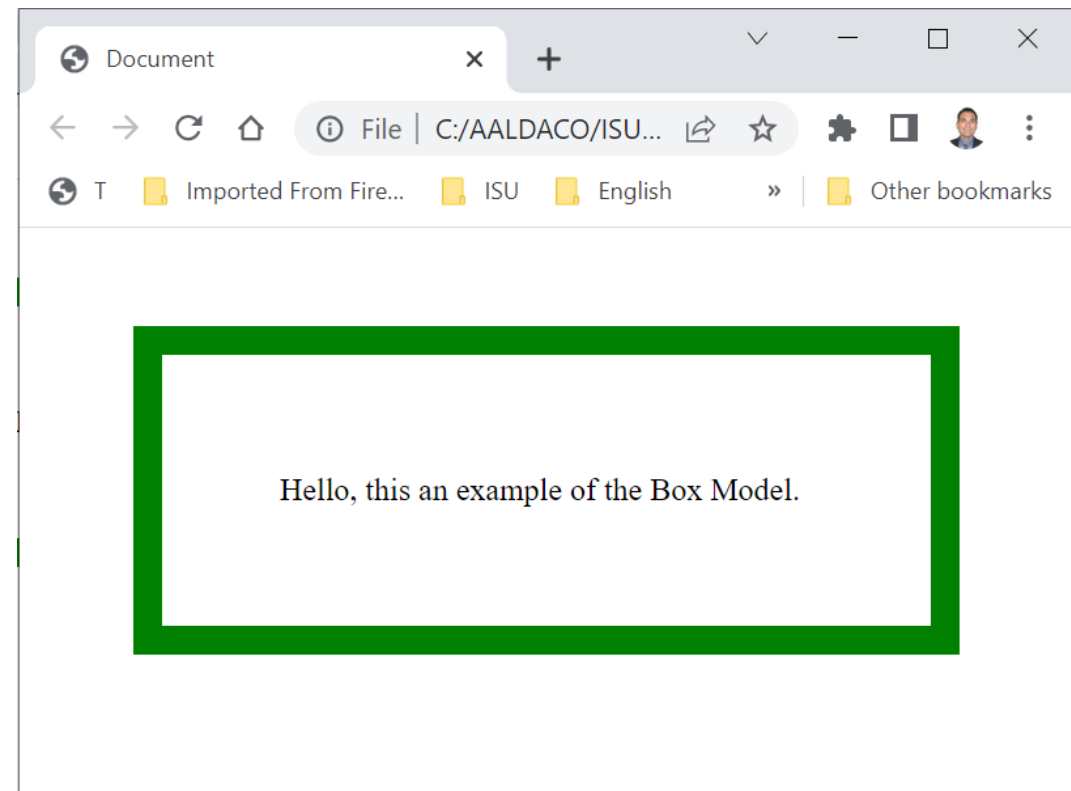
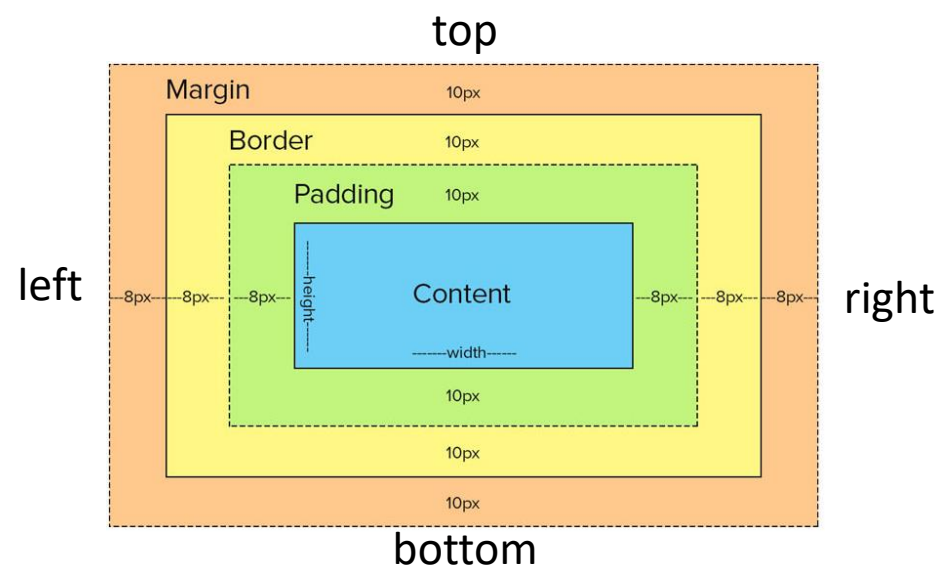
```
padding: 60px;
```

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible"
content="IE=edge">
  <meta name="viewport" content="width=device-
width, initial-scale=1.0">
  <style>
    div {
      margin: 50px;
      border: 12px solid green;
      padding: 60px;
    }
  </style>
  <title>Document</title>
</head>
<body>

  <div>
    Hello, this an example of the Box Model.
  </div>
</body>
</html>

```

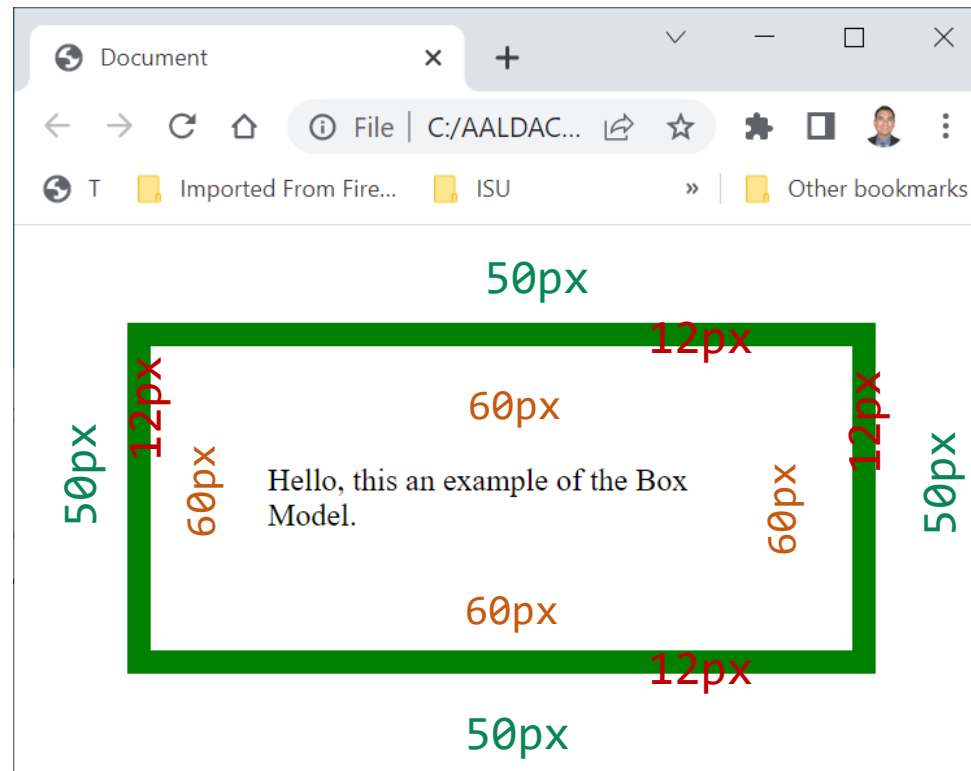
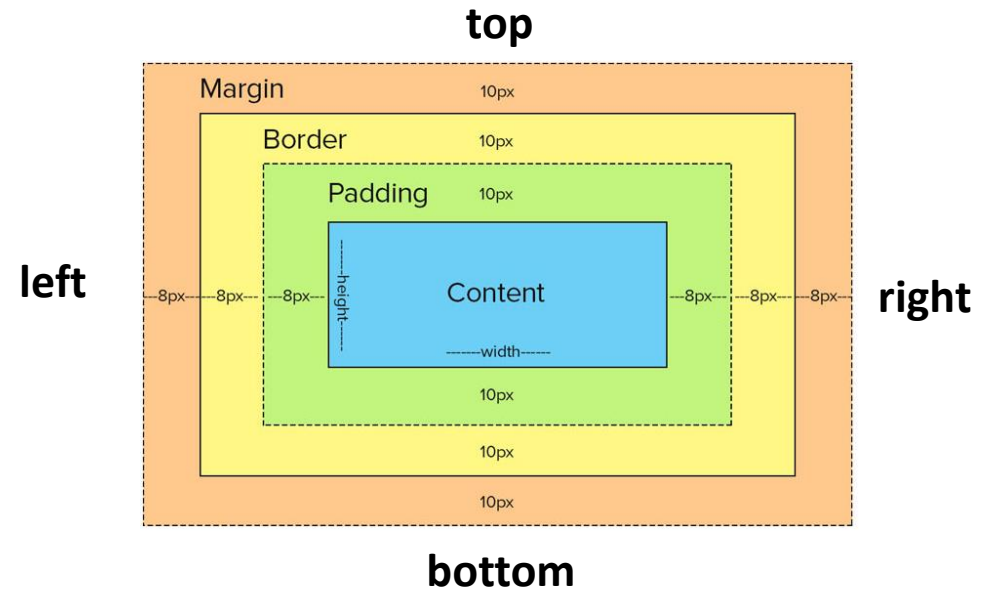


If it is not specified **left**, **top**, **right** and/or **bottom**, like this :

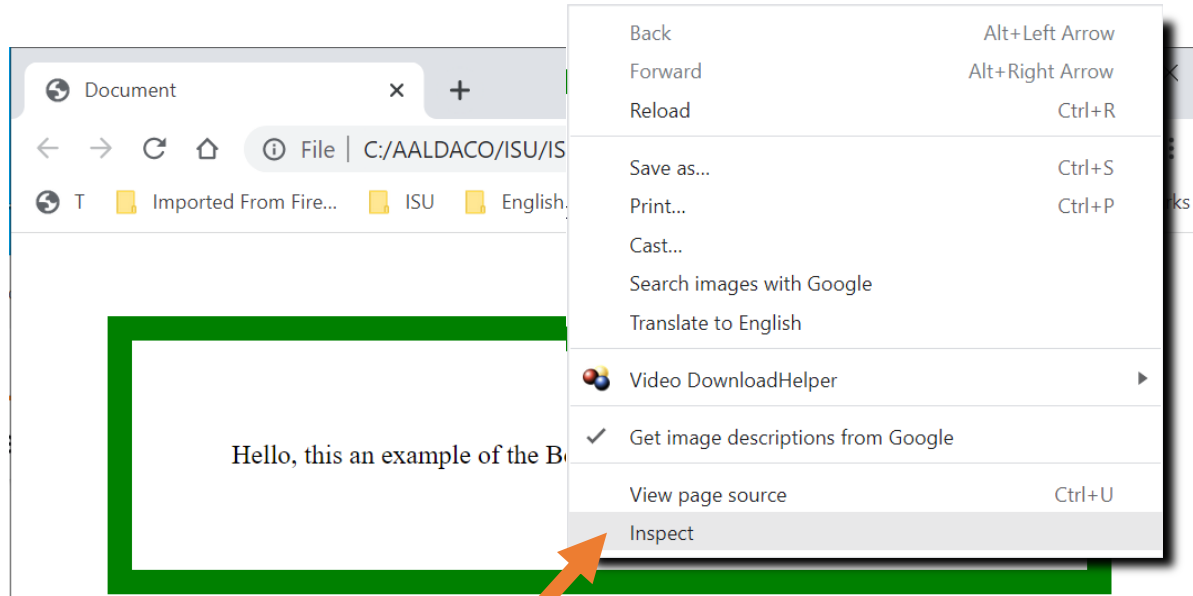
```
margin: 50px;
```

Therefore, the margin is applied to the four extremes.

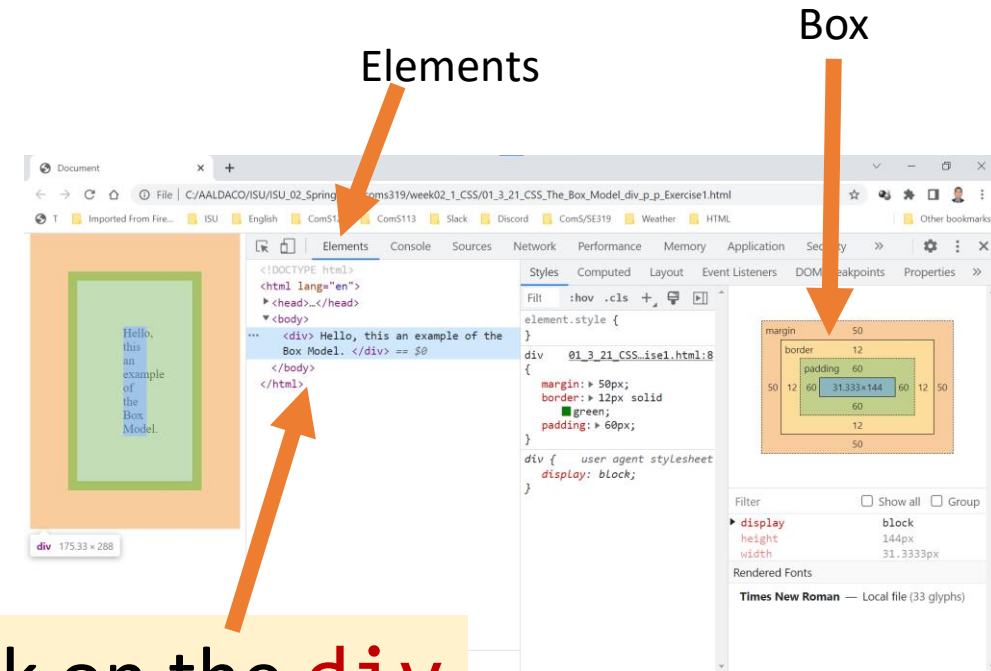
```
<style>
  div {
    margin: 50px;
    border: 12px solid green;
    padding: 60px;
  }
</style>
```



# Inspect the page in your Browser :



Right Click on the page and select **Inspect**.



Click on the **div** element.

Let's to modify the **Box** by the left side

```
margin-left: 0px;
```

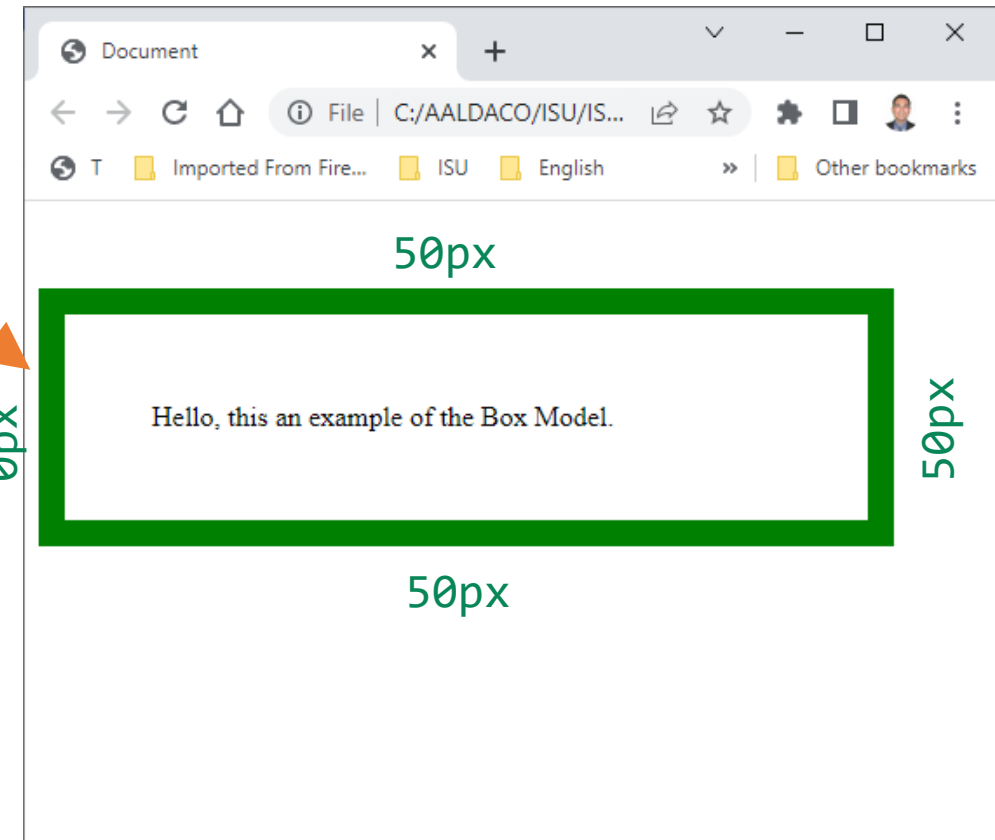
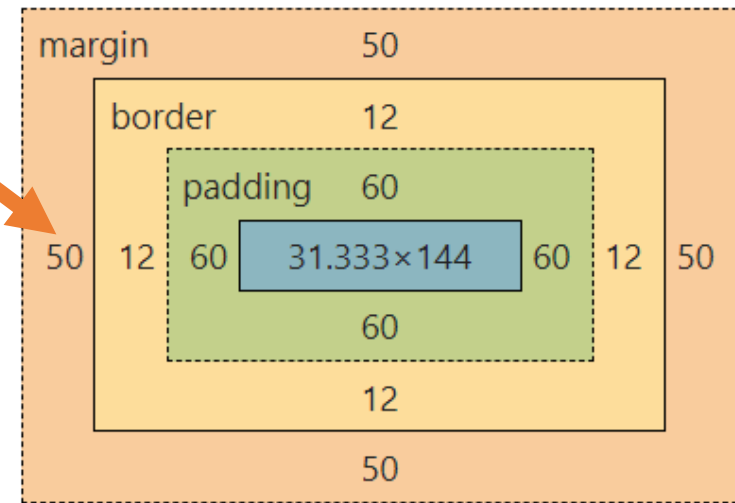
```
border-left: 2px solid blue;
```

```
padding-left: 0px;
```

Let's to modify **margin** value  
by the left side :

```
margin: 50px;  
border: 12px solid green;  
padding: 60px;  
margin-left: 0px;
```

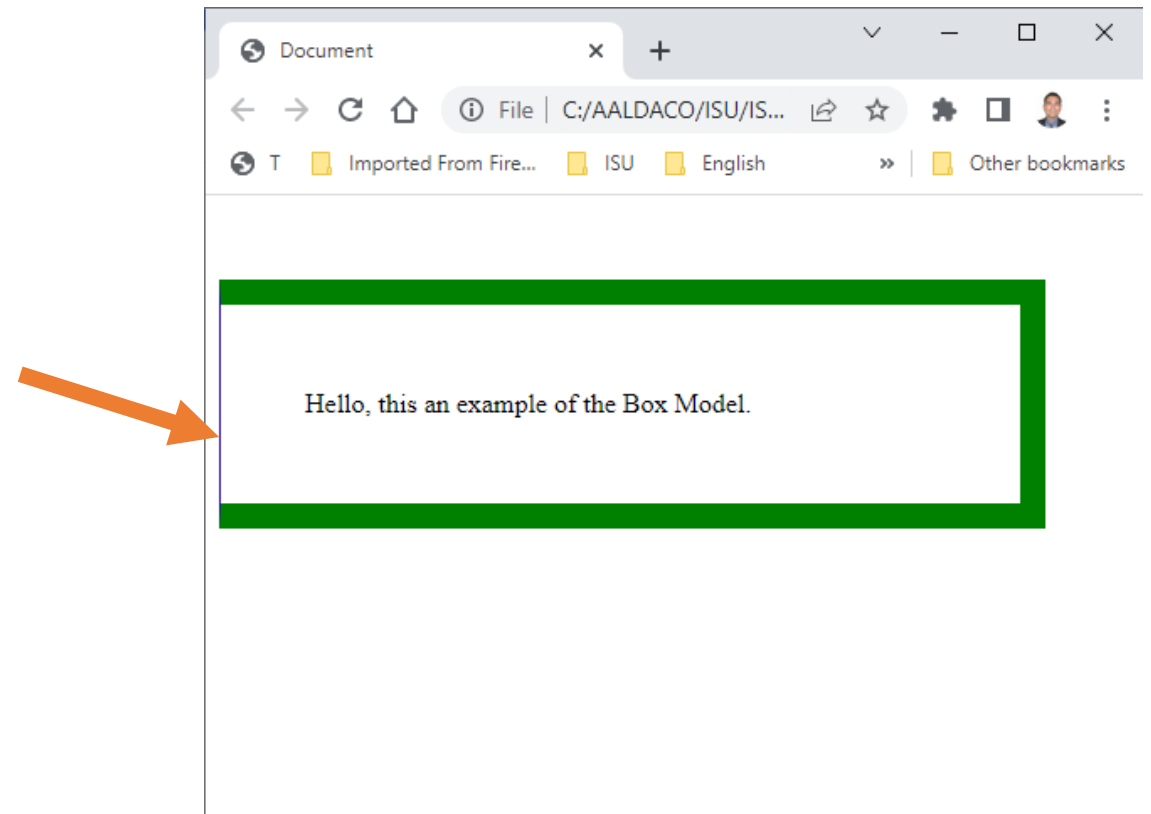
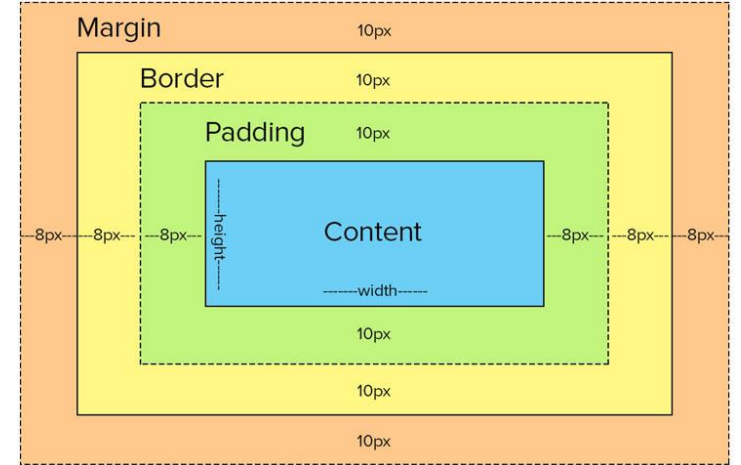
Modify  
your code





Let's to modify **border** value by the left side :

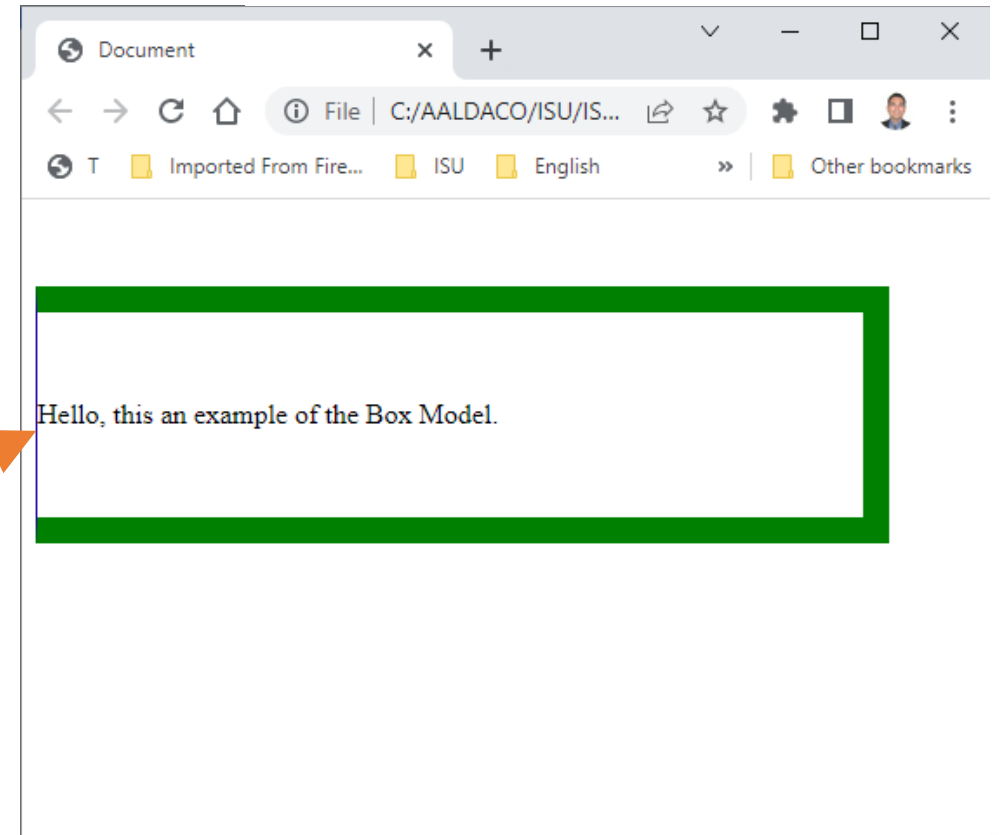
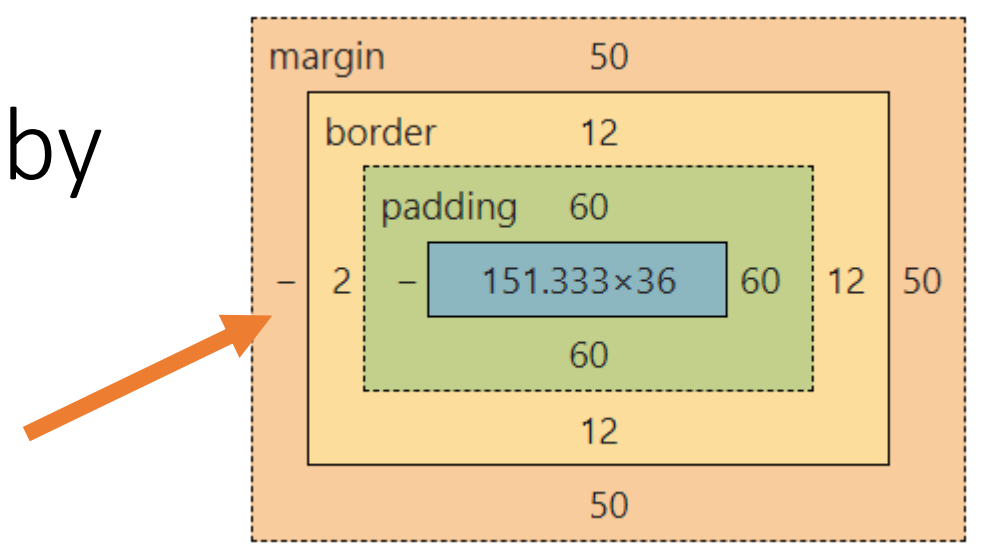
```
margin: 50px;  
border: 12px solid green;  
padding: 60px;  
margin-left: 0px;  
border-left: 2px solid blue;
```



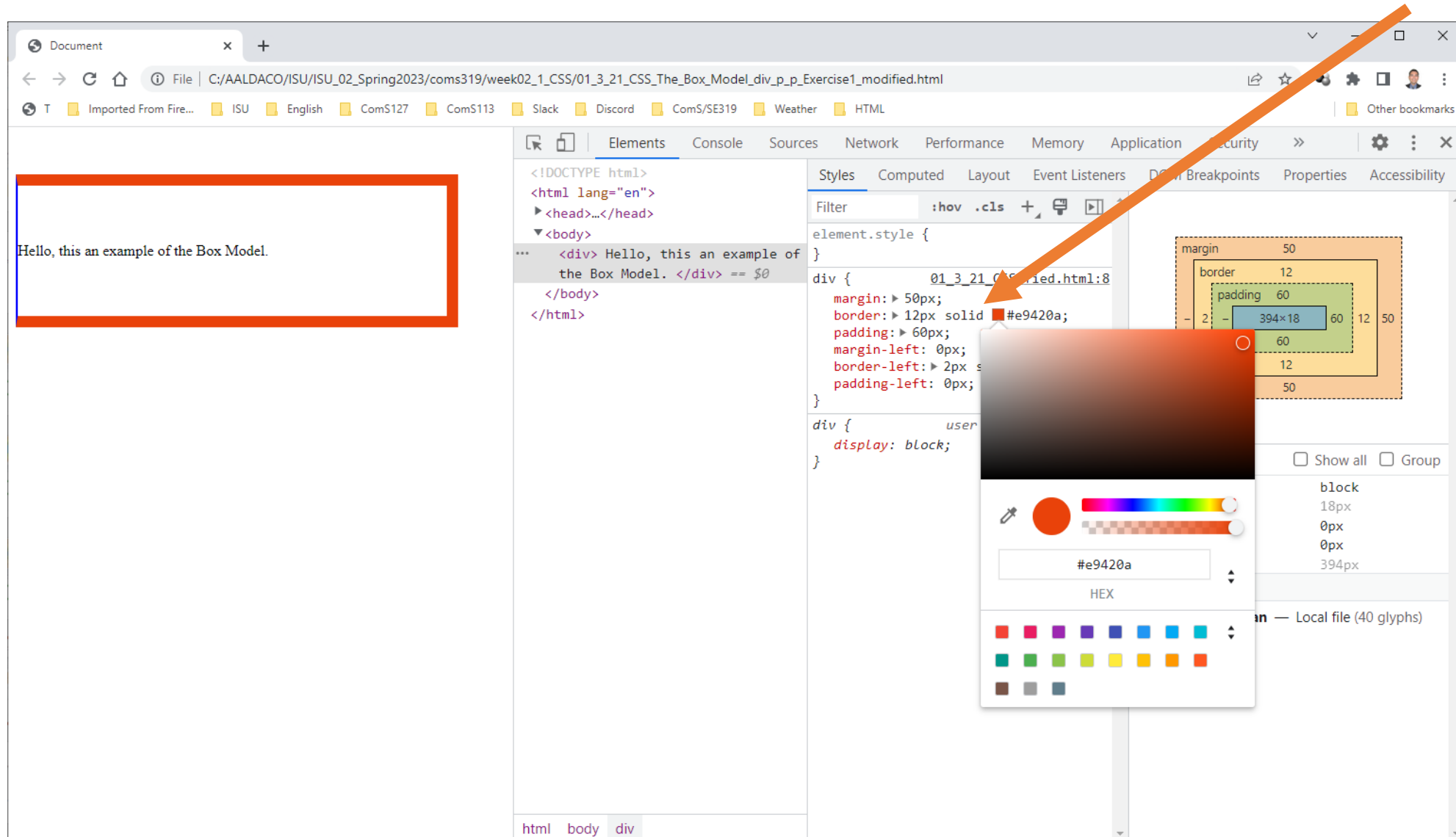
Let's to modify **padding** value by the left side :

```
margin: 50px;  
border: 12px solid green;  
padding: 60px;  
margin-left: 0px;  
border-left: 2px solid blue;  
padding-left: 0px;
```

Don't forget  
Click **<div>**  
element



# Experiment with **values** while viewing **INSPECT** :



# < exercise />

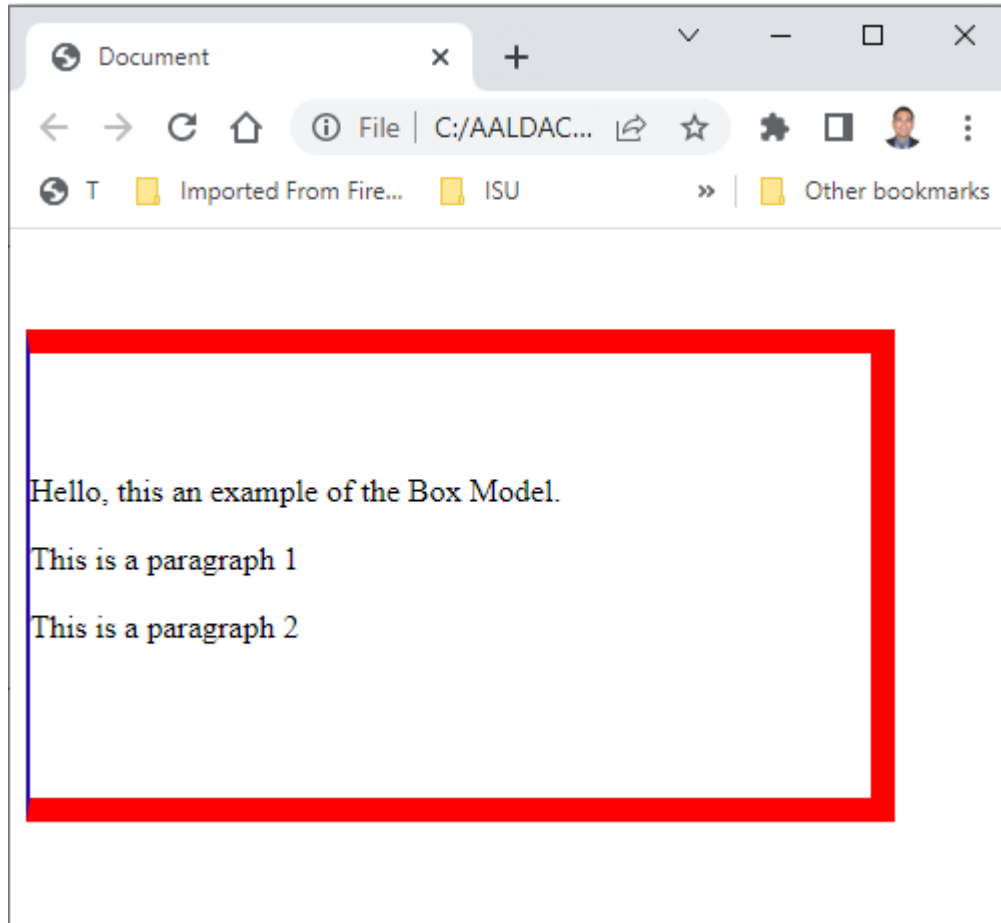
Create a `<div> </div>` HTML element which includes two `<p> </p>` elements :

```
<div>  
    Hello, this an example of the Box Model.  
    <p>This is a paragraph 1</p>  
    <p>This is a paragraph 2</p>  
</div>
```

The parent of  
`<p>` elements is  
`<div>`

and DO NOT assign any attribute of margin, border or padding to any `<p> </p>` :

You will observe a CASCADING effect on `<p>` of the attributes from its parent, the `<div>` element.



Observe that the properties of the `<div>` are cascaded to `<p>`:

```
div {  
  margin: 50px;  
  border: 12px solid rgb(255, 0, 0);  
  padding: 60px;  
  margin-left: 0px;  
  border-left: 2px solid rgb(0, 0, 255);  
  padding-left: 0px;  
}
```

That happens because `<p>` is a sub-Element in `<div>` .

Or `<p>` is a child of `<div>`.

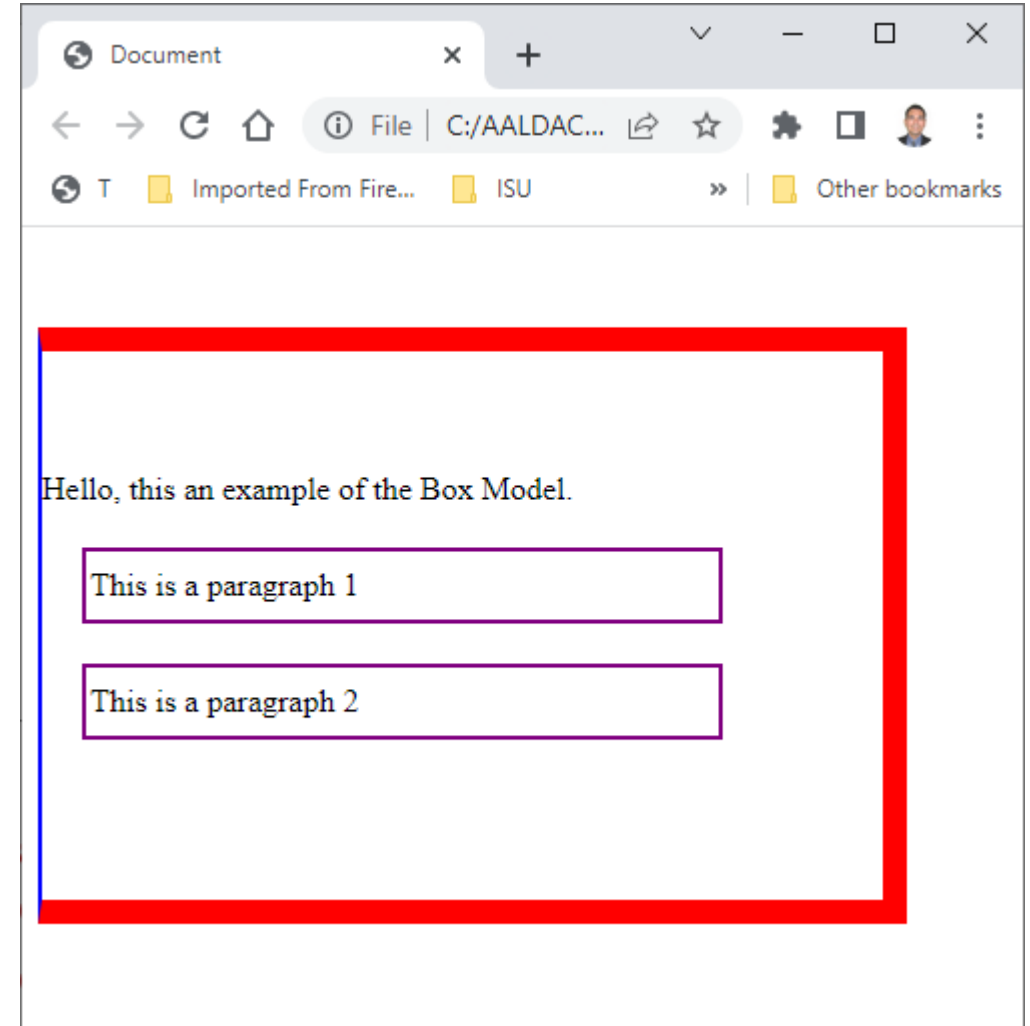
Now, let's give properties to `<p> </p>`.

```
p {  
  margin: 20px;  
  border: 2px solid purple;  
  padding: 8px;  
  padding-left: 2px;  
}
```

...

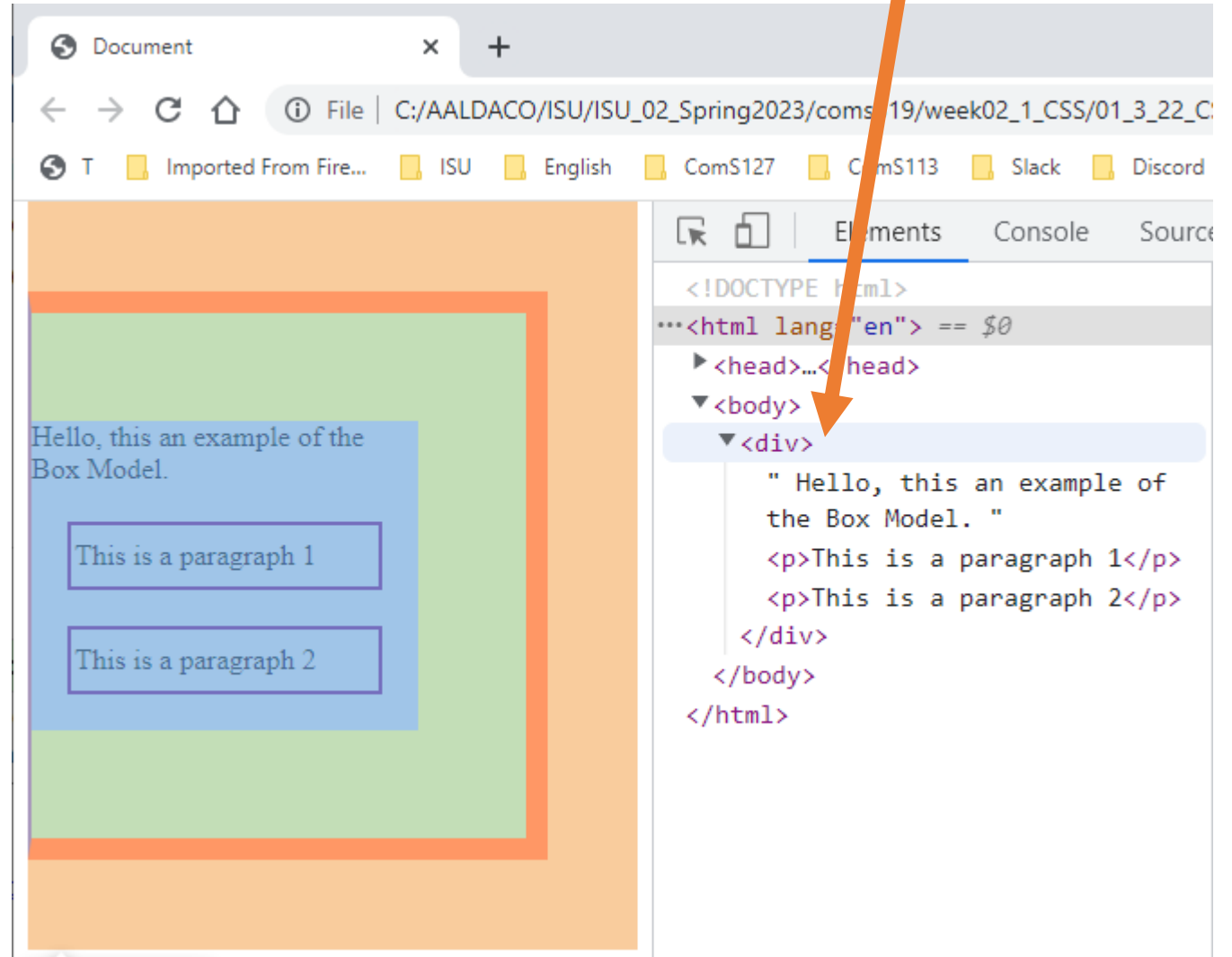
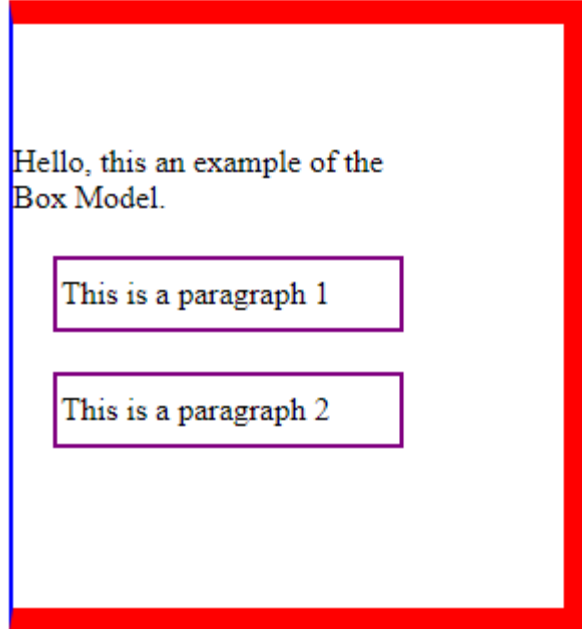
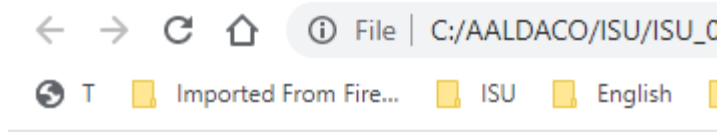
```
<style>
  div {
    margin: 50px;
    border: 12px solid rgb(255, 0, 0);
    padding: 60px;
    margin-left: 0px;
    border-left: 2px solid rgb(0, 0, 255);
    padding-left: 0px;
  }
  p {
    margin: 20px;
    border: 2px solid purple;
    padding: 8px;
    padding-left: 2px;
  }
</style>
<title>Document</title>
</head>
<body>

  <div>
    Hello, this an example of the Box Model.
    <p>This is a paragraph 1</p>
    <p>This is a paragraph 2</p>
  </div>
</body>
```



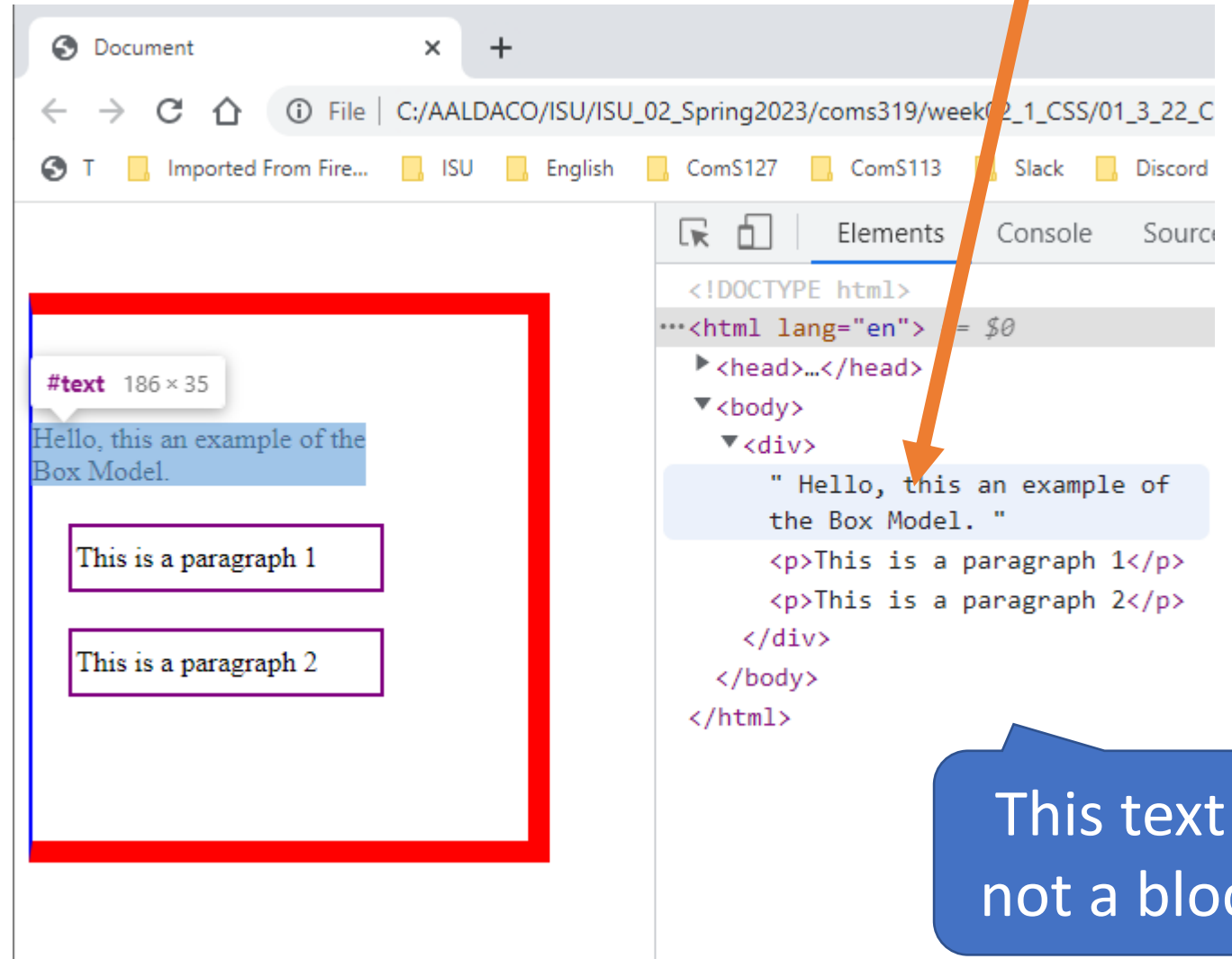
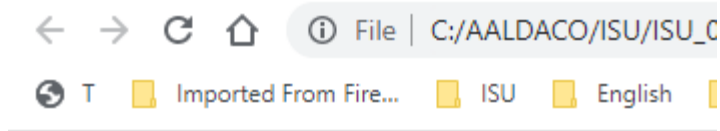
# Inspect the Web page :

Click `<div>`



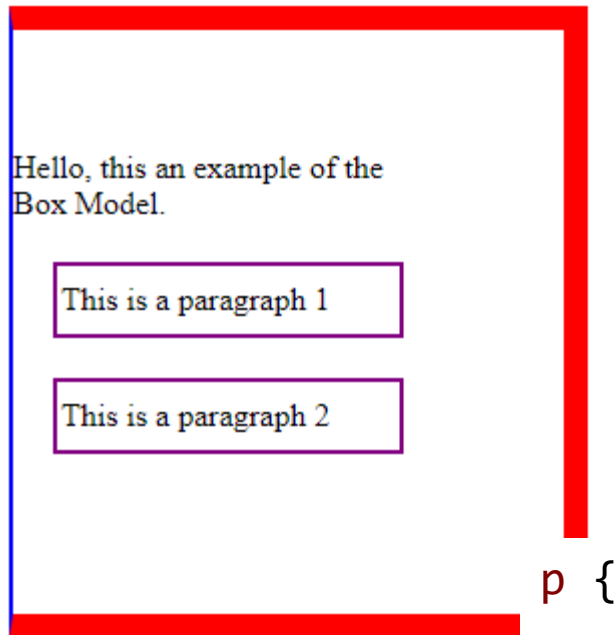
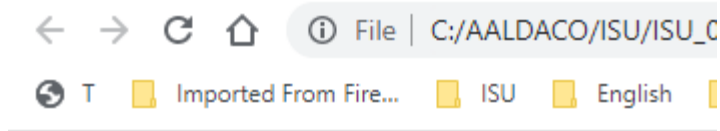


Click the text in `<div>`



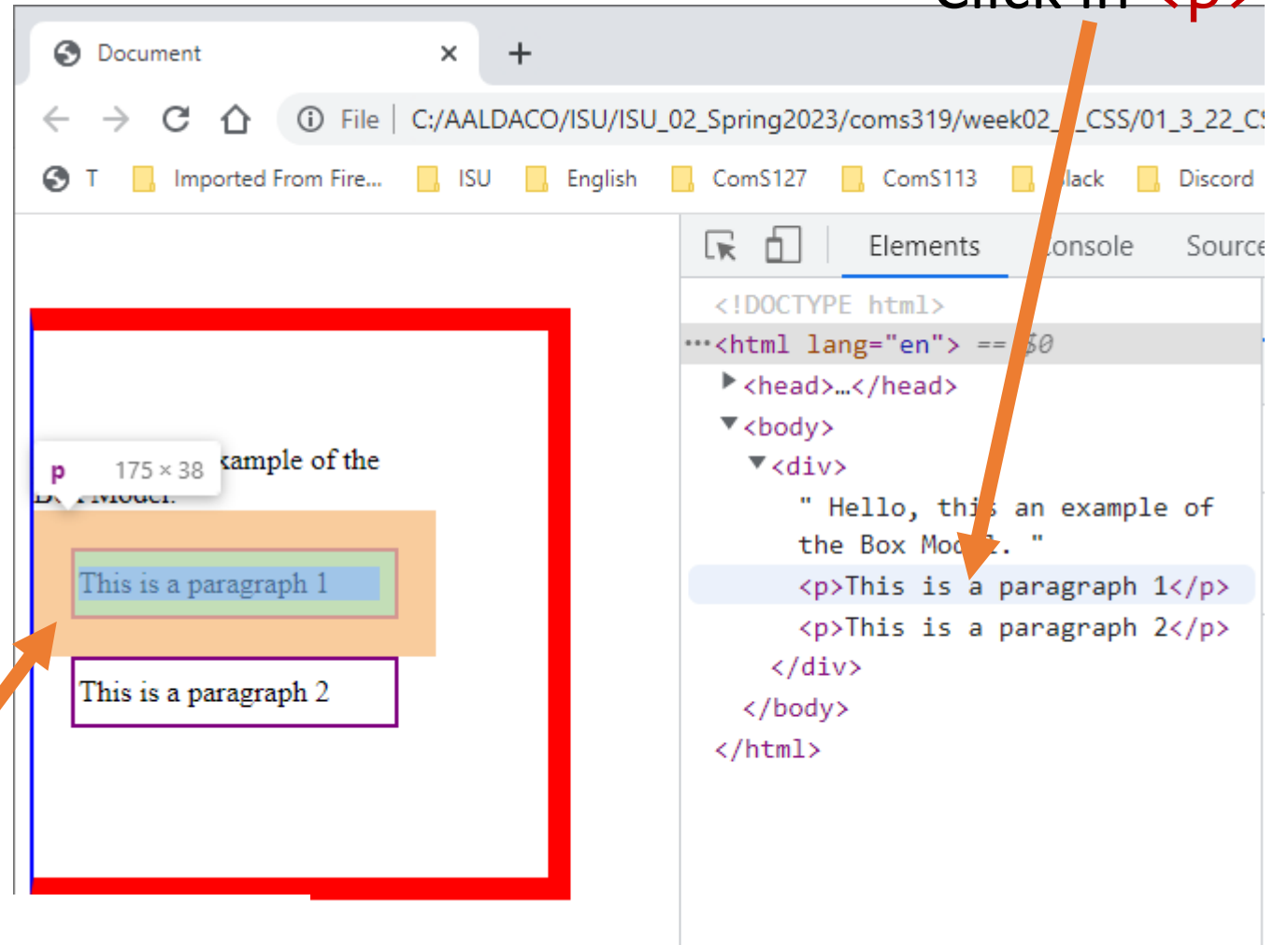
This text is not a block.

Click in `<p>`



p {

```
margin: 20px;  
border: 2px solid purple;  
padding: 8px;  
padding-left: 2px;  
}
```



Check this if there is algo interesting :

<https://www.digitalocean.com/community/tutorials/how-to-adjust-the-content-padding-border-and-margins-of-an-html-element-with-css>