

Git Bash

Terminal commands are useful ways to navigate between folders, also called directories, quickly and easily.

The commands are entered into the terminal or bash.

Open your terminal and do the following:

We use `ls` to list the contents of the current directory.

In the home directory, we see a list of directories including the Desktop directory.

```
ls
```

To move back up to our previous directory, we use `cd`

```
cd
```

We check our working directory with `pwd`.

When we print the working directory, it shows us the path.

```
pwd
```

We use the `mkdir` command to create a new directory.

```
mkdir
```

We use `touch` to create a new file named `index.html`.

```
touch index.html
```

Open [Github](https://github.com/) in your browser.

Click on `create repository`.

While the remote repo is now created, we need to pull down the repository to our machine to make changes to it.

We use the git command `git clone` followed by the URL copied from Github to clone the repo to our machine.

```
git clone <url>
```

The `git clone` command creates a new directory with the same name as the repository. We navigate into our new directory using `cd`.

```
cd
```

We add an HTML file to our local repo using `touch`.

```
touch index.html
```

We use `git add` to add our changes.

```
git add -A
```

To commit our changes, we use `git commit -m` with a commit message.

```
git commit -m "First commit"
```

To push our changes back up to the repo we created on Github, we use `git push`.

```
git push origin main
```

It is important that we keep our local repo up-to-date.

To pull down any changes from the repo we created on Github and update the repo on our local machine, we use `git pull`.

The origin refers to the repo that we cloned and main is the branch.

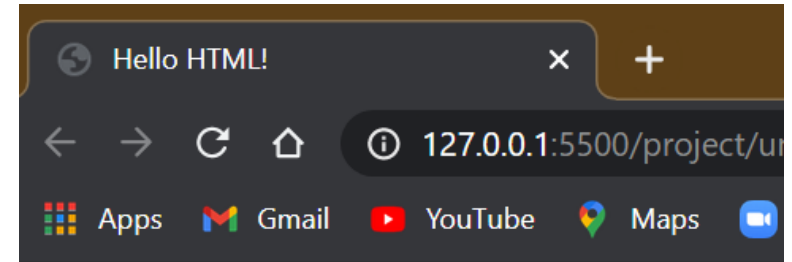
The default branch is main.

```
git pull origin main
```

HTML

```
<!DOCTYPE html>
<html lang="en-US">
  <head>
    <meta charset="UTF-8">
    <title>Hello HTML!</title>
  </head>
  <body>
    <header>
      <!-- Headers -->
      <h1>Hello World!</h1>
      <h2>Hello World!</h2>
      <h3>Hello World!</h3>
      <h4>Hello World!</h4>
      <h5>Hello World!</h5>
      <h6>Hello World!</h6>
    </header>
    <section>
      <!-- Image -->
      
      <!-- Paragraph -->
      <p>This is a paragraph.</p>
      <p>This is a paragraph with <strong>BOLDED TEXT</strong>.</p>

      <!-- Unordered list -->
      <ul>
        <li>This is list item one</li>
        <li>This is list item two</li>
        <li>This is list item three</li>
      </ul>
      <!-- Link -->
      <a href="https://www.google.com">This is a link to Google.com</a>
    </section>
  </body>
</html>
```



Hello World!


Hello World!

Hello World!

Hello World!

Hello World!

Hello World!

placeholder image

This is a paragraph.

This is a paragraph with **BOLDED TEXT**.

- This is list item one
- This is list item two
- This is list item three

[This is a link to Google.com](https://www.google.com)

```

<!DOCTYPE html>
<html lang="en-US">
<head>
  <meta charset="UTF-8">
  <title>HTML Bio</title>
  <!--Link to style sheet-->
  <!--The rel attribute specifies relationship between
        linked documents-->
  <!--The href attribute creates a link to another file or webpage-->
  <link rel="stylesheet" href="./assets/css/style.css">
</head>
<body>
  <div class="container">
    <header>
      <h1>HTML Attributes</h1>
    </header>
    <section class="section">
      <h2>Image and Link Attributes</h2>
      <h4>are used to configure or adjust behavior of
        specific elements</h4>
      <!-- The src attribute is used with <img> to specify an absolute
            or relative path to an image -->
      <!-- The alt attribute specifies the alternative text for an image -->
      
      <br>
      
      <br>
      <!-- The href attribute is used with <a> to specify a URL-->
      <a href="https://www.google.com">
        This is a link to Google.com</a>
    </section>
    <!-- A class is used to identify one or more elements-->
    <section class="section">
      <h2>Global Attributes</h2>
      <h4>can be used on any element and are often used to
        identify element for styling</h4>
      <!--An id is an unique identifier to identify a single element-->
      <p id="paragraph-1">Lorem ipsum, dolor sit amet consectetur ...</p>
      <p id="paragraph-2">Lorem ipsum, dolor sit amet consectetur ...</p>
      <p id="paragraph-3">Lorem ipsum, dolor sit amet consectetur ...</p>
      <br>
    </section>
  </div>
</body>
</html>

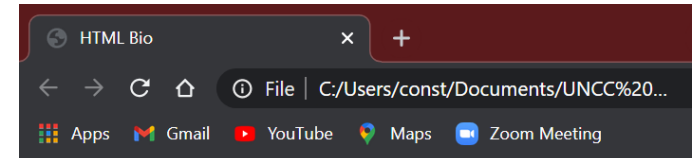
```

Attributes

```

.section {
  background-color: lemonchiffon;
}
#paragraph-1 {
  color: darkslateblue;
  background-color: white;
}
#paragraph-2 {
  color: darkslateblue;
  background-color: darkorange;
}
#paragraph-3 {
  color: white;
  background-color: darkslateblue;
}

```

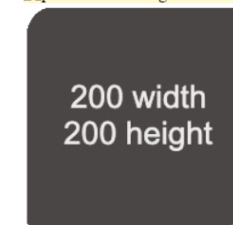


HTML Attributes

Image and Link Attributes

are used to configure or adjust behavior of specific elements

placeholder image



[This is a link to Google.com](https://www.google.com)

Global Attributes

can be used on any element and are often used to identify element for styling

Lorem ipsum, dolor sit amet consectetur adipisicing elit.

Lorem ipsum, dolor sit amet consectetur adipisicing elit.

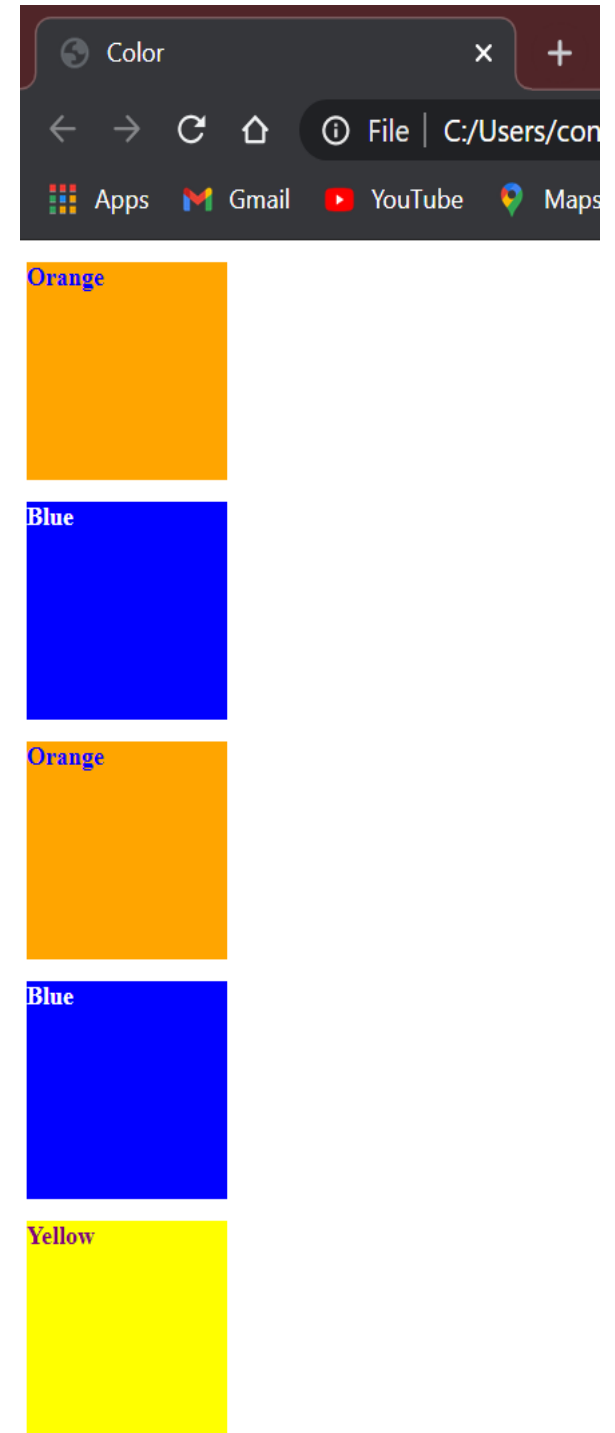
Lorem ipsum, dolor sit amet consectetur adipisicing elit.

Attributes

```
<!DOCTYPE html>
<html lang="en-US">
  <head>
    <meta charset="UTF-8">
    <meta name="viewport"
      content="width=device-width, initial-scale=1.0">
    <!-- The href attribute points to the relative path of the stylesheet-->
    <link rel="stylesheet" href="./assets/css/style.css">
    <title>Color</title>
  </head>
  <body>
    <!--Class attributes added for styling -->
    <section class="section box-orange">
      <h2>Orange</h2>
    </section>
    <section class="section box-blue">
      <h2>Blue</h2>
    </section>
    <section class="section box-orange">
      <h2>Orange</h2>
    </section>

    <section class="section box-blue">
      <h2>Blue</h2>
    </section>
    <!--id attribute added for styling-->
    <section class="section" id="box-yellow">
      <h2>Yellow</h2>
    </section>
  </body>
</html>
```

```
.section {
  /*Sets the height and width of the section */
  width: 200px;
  height: 200px;
}
.box-blue {
  /* Sets font color */
  color: white;
  /* Sets background color */
  background-color: #0000ff;
}
.box-orange {
  /* Uses hex codes to define color */
  color: #0000ff;
  background-color: #ffa500;
}
#box-yellow {
  /* Uses predefined colors to define color */
  color: purple;
  background-color: yellow;
};
```



```

<!DOCTYPE html>
<html lang="en-us">
<head>
  <meta charset="UTF-8">
  <title>Student Bio</title>
  <link rel="stylesheet" type="text/css" href="./assets/css/style.css">
</head>
<body>
  <section class="section" id="section-1">
    <h2>Section 1</h2>
  </section>
  <section class="section section-blue">
    <h2>Section 2</h2>
  </section>
  <section class="section section-blue">
    <h2>Section 3</h2>
  </section>
  <div class="container">
    <section>
      <h2>Section 4</h2>
    </section>

    <section>
      <h2>Section 5</h2>
    </section>

    <section id="section-6">
      <h2>Section 6</h2>
    </section>
  </div>
</body>
</html>

```

Unit Font

```

.section {
  width: 200px;
  height: 100px;
  /* Font-family property specifies a list of fonts to be used in order of priority */
  font-family: "Comic Sans MS", cursive, sans-serif;
}

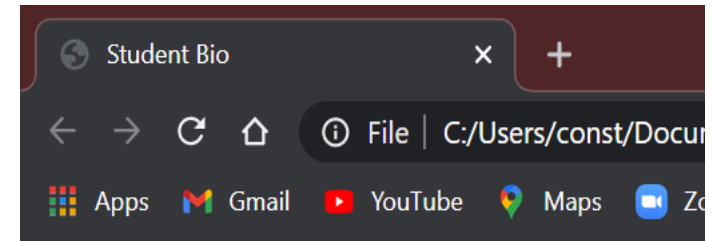
.section-blue {
  /* Line-height property sets the distance between lines of text */
  line-height: 100px;
  color: #ffa500;
  background-color: #0000FF;
}

.container {
  font-family: "Lucida Console", Monaco, monospace;
  color: white;
  background-color: black;
}

#section-1 {
  /* Font-size property sets the size of a font */
  font-size: 26px;
  color: #ffff00;
  background-color: #800080;
}

#section-6 {
  color: #ffff00;
}

```



Section 1

Section 2

Section 3

Section 4

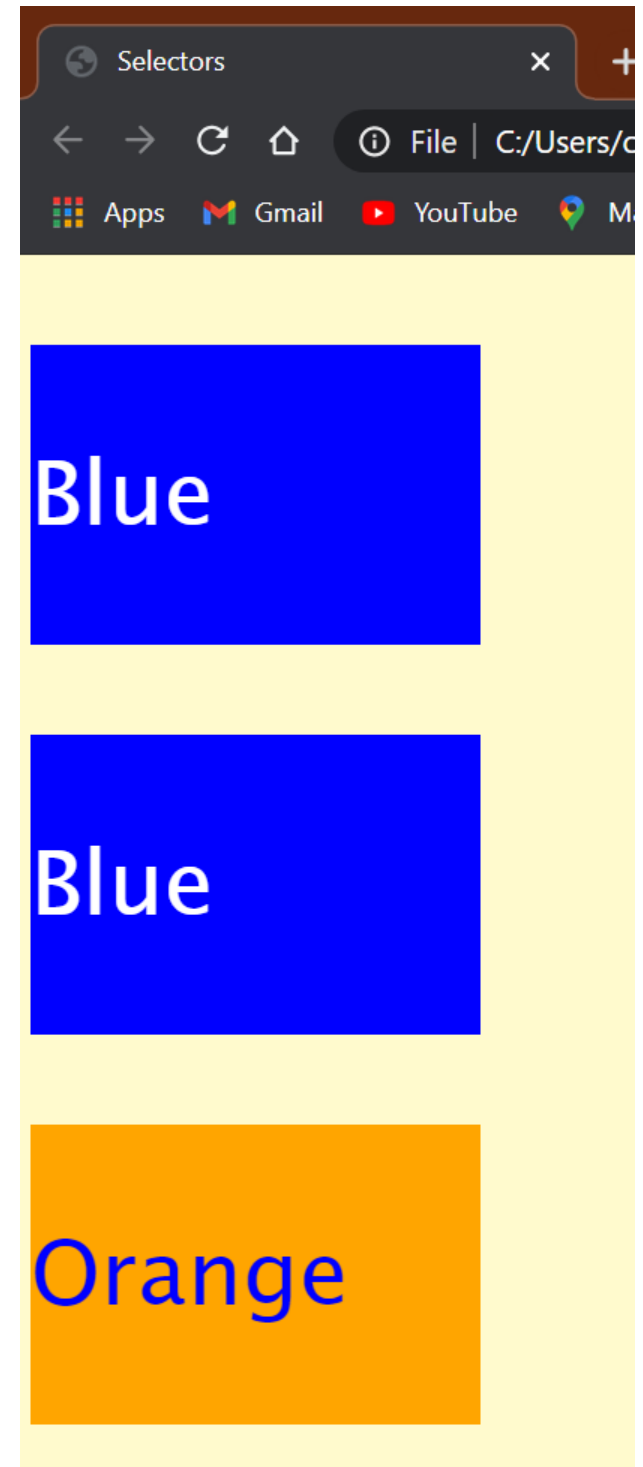
Section 5

Section 6

Selectors

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport"
    content="width=device-width, initial-scale=1.0">
  <link rel="stylesheet" type="text/css" href="./assets/css/style.css">
  <title>Selectors</title>
</head>
<body>
  <section class="box-blue">
    <p>Blue</p>
  </section>
  <section class="box-blue">
    <p>Blue</p>
  </section>
  <section id="box-orange">
    <p>Orange</p>
  </section>
</body>
</html>
```

```
/* Universal Selector */
* {
  font-family: "Lucida Sans Unicode", "Lucida Grande", sans-serif;
}
/* Element Selectors select all of that element type */
body {
  background-color: lemonchiffon;
}
section {
  height: 200px;
  width: 300px;
}
p {
  font-size: 60px;
  line-height: 200px;
}
/* Class Selectors select all elements with that class */
.box-blue {
  color: white;
  background-color: blue;
}
/* Id Selectors are unique a unique id to identify an element */
#box-orange {
  color: blue;
  background-color: orange;
}
```



```

<!DOCTYPE html>
<html lang="en-US">
  <head>
    <meta charset="UTF-8" /> <title>HTML Display</title>
    <link rel="stylesheet" href="/assets/css/style.css" />
  </head>
  <body>
    <header>
      <!-- Headers -->
      <h1>CSS Display Property</h1>
    </header>
    <section>
      <h2>Inline Elements</h2>
      <h3>do not start on a new line</h3>
      <h3>and only take up as much width as necessary.</h3>
      <!-- Anchor elements <a> are inline elements-->
      <h4>Anchor elements</h4>
      <a class="first-element"
        href="https://developer.mozilla.org/en-US/docs/Web/HTML/Inline_elements"
        >MDN Web Docs on Inline Elements</a>
      <a class="second-element"
        href="https://developer.mozilla.org/en-US/docs/Web/HTML/Block-level_elements"
        >MDN Web Docs on Block-Level Elements</a>
      <!-- Images <img> are inline elements-->
      <h4>Image elements</h4>
      
      
    </section>
    <section>
      <h2>Block Elements</h2>
      <h3>always start on a new line and take up the full width available.</h3>
      <!-- Paragraph <p> elements are block elements-->
      <h4>Paragraph elements</h4>
      <p class="first-element">This is a paragraph.</p>
      <p class="second-element">
        This is a paragraph with <strong>BOLDED TEXT</strong>.
      </p>
      <!-- Unordered lists are block elements-->
      <h4>Unordered list</h4>
      <ul>
        <li class="first-element">This is list item one</li>
        <li class="second-element">This is list item two</li>
      </ul>
    </section>
    <section>
      <h2>display:inline</h2>
      <h3>changes a block element's property to inline.</h3>
      <h4>Paragraph element with display:inline</h4>
      <p class="first-element display-inline">This is a paragraph.</p>
      <p class="second-element display-inline">
        This is a paragraph with <strong>BOLDED TEXT</strong>.
      </p>
    </section>
    <section>
      <h2>display:block</h2>
      <h3>changes an inline element's property to block.</h3>
      <h4>Image elements with display:block</h4>
      
      
    </section>
    <section>
      <h2>display:none</h2>
      <h3>hides an element.</h3>
      <h4>Unordered list with display:none</h4>
      <ul class="display-none">
        <li>This is list item one</li>
        <li>This is list item two</li>
      </ul>
      <br />
    </section>
  </body>
</html>

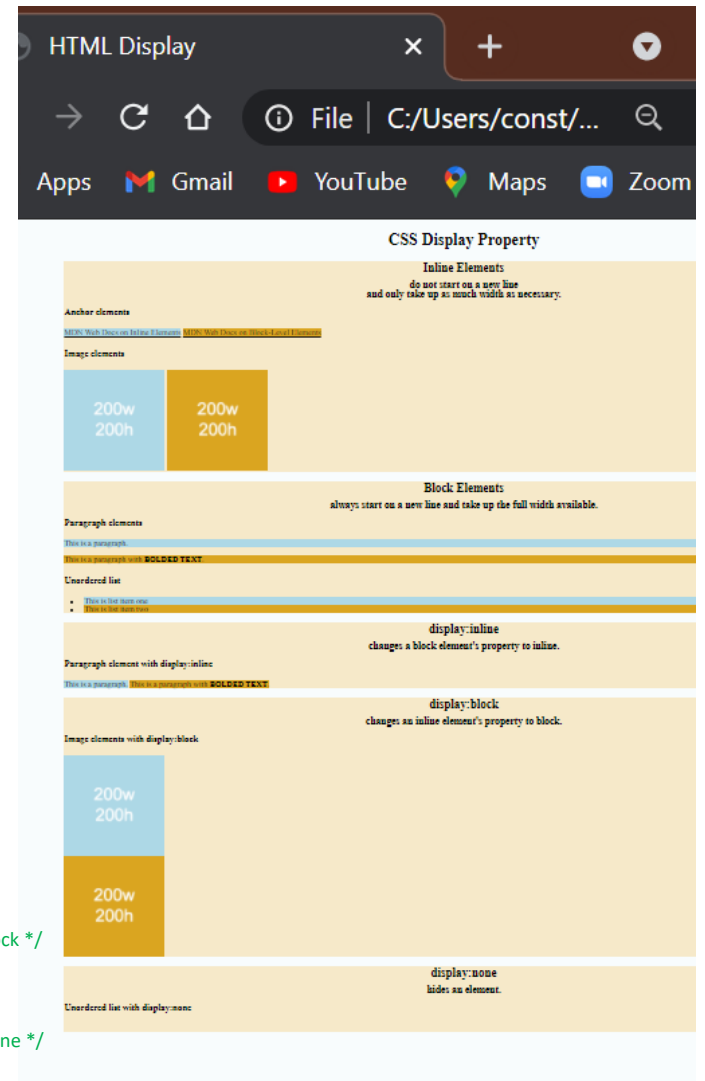
```

HTML Display

```

body {
  background-color: #f8fcd;
}
h1, h2, h3 {
  text-align: center;
}
h3 {
  font-size: 20px;
  line-height: 2px;
}
h4 {
  font-size: 18px;
}
a {
  font-size: 16px;
  color: #181510;
}
section {
  margin: 0 auto;
  width: 80%;
  background-color: #f6e9c9;
}
.first-element {
  background-color: lightblue;
}
.second-element {
  background-color: goldenrod;
}
/* Sets display of all elements with class selector to block */
.display-block {
  display: block;
}
/* Sets display of all elements with class selector to inline */
.display-inline {
  display: inline;
}
/* Sets display of all elements with class selector to inline */
.display-none {
  display: none;
}

```



```

<!DOCTYPE html>
<html lang="en-US">
<head>
  <meta charset="UTF-8" /> <title>CSS Box Model</title>
  <link rel="stylesheet" href="/assets/css/style.css" />
</head>
<body>
  <header>
    <h1>HTML Box Model</h1>
  </header>
  <section>
    <div class="example-box">
      <h2>Content Area</h2>
      <h3>is made up of the width and height of the content</h3>
      
      <h4>The content has a width of 200px</h4>
      <h4>The content has a height of 200px</h4>
    </div>
  </section>
  <section>
    <div class="example-box">
      <h2>Padding Area</h2>
      <h3>extends the content area to include padding around it</h3>
      
      <h4>The content has a width of 200px</h4>
      <h4>The content has a height of 200px</h4>
      <h4>The padding on each side of the content is 20px</h4>
    </div>
  </section>
  <section>
    <div class="example-box">
      <h2>Border Area</h2>
      <h3>
        extends the content area and padding to include border around it
      </h3>
      
      <h4>The content has a width of 200px</h4>
      <h4>The content has a height of 200px</h4>
      <h4>The padding on each side of the content is 20px</h4>
      <h4>The border on each side is 10px</h4>
    </div>
  </section>
  <section>
    <div class="example-box">
      <h2>Margin Area</h2>
      <h3>
        extends the content area, padding, and border to include the margin
        around it
      </h3>
      
      
      <h4>The content has a width of 200px</h4>
      <h4>The content has a height of 200px</h4>
      <h4>The padding on each side of the content is 20px</h4>
      <h4>The border on each side is 10px</h4>
      <h4>The margin on each side is 20px.</h4>
      <h4>
        Total width of each box = 300px (200px + 20px + 20px + 10px + 10px +
        20px + 20px)
      </h4>
      <h4>
        Total height of each box = 300px (200px + 20px + 20px + 10px + 10px +20px + 20px)
      </h4>
    </div>
  </section>
</body>
</html>

```

Box Model

```

header {
  height: 100px;
  width: 100%;
  /* Sets border to bottom only */
  border-bottom: 10px solid darkblue;
  background-color: #999900;
}

section {
  width: 70%;
  /* Sets top and bottom margin to 20px.
    Auto will center element */
  margin: 20px auto;
  border-bottom: 5px solid darkblue;
  background-color: #ffffd4;
}

h1 {
  text-align: center;
  line-height: 100px;
}

h2 {
  /* Sets bottom margin to 0 */
  margin-bottom: 0;
}

h3 {
  /* Sets top margin to 0 */
  margin-top: 0;
}

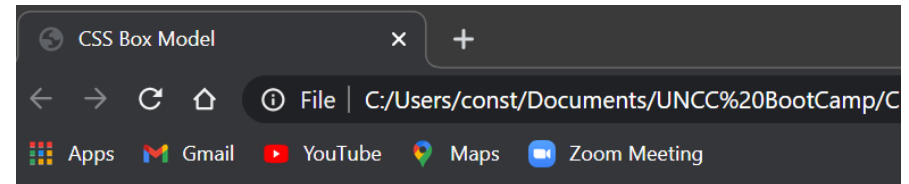
.example-box {
  /* Shortcut method sets top and bottom padding
    to 20px and left and right to 40px */
  padding: 20px 40px;
}

.image-padding {
  /* Sets padding on all sides to 20px */
  padding: 20px;
  background-color: #999900;
}

.image-border {
  /* Sets border on all sides */
  border: 10px solid darkblue;
}

.image-margin {
  /* Sets all sides to 20px */
  margin: 20px;
}

```



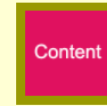
HTML Box Model

Content Area
is made up of the width and height of the content



The content has a width of 200px;
The content has a height of 200px

Padding Area
extends the content area to include padding around it



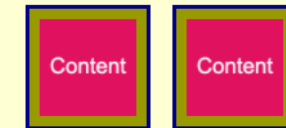
The content has a width of 200px;
The content has a height of 200px;
The padding on each side of the content is 20px

Border Area
extends the content area and padding to include border around it



The content has a width of 200px;
The content has a height of 200px;
The padding on each side of the content is 20px;
The border on each side is 10px

Margin Area
extends the content area, padding, and border to include the margin around it



The content has a width of 200px;
The content has a height of 200px;
The padding on each side of the content is 20px;
The border on each side is 10px;
The margin on each side is 20px;
Total width of each box = 300px (200px + 20px + 20px + 10px + 10px + 20px + 20px)
Total height of each box = 300px (200px + 20px + 20px + 10px + 10px + 20px + 20px)


```

<!DOCTYPE html>
<html lang="en-US">
  <head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <link rel="stylesheet" href="./assets/css/style.css">
    <title>CSS Positioning</title>
  </head>
  <body>
    <header>
      <h1>CSS Positioning</h1>
    </header>
    <section>
      <h2>Static Position</h2>
      
      <h3>Element is in normal flow. This is the default value.</h3>
    </section>
    <section>
      <h2>Relative Position</h2>
      
      <h3>Element is in normal flow but is offset based on provided value.</h3>
      <h3>The values top, right, left and bottom can be used to offset element.</h3>
    </section>
    <section id="absolute-section">
      <h2>Absolute Position</h2>
      
      <h3>The element is removed from the normal flow.</h3>
      <h3>Its final position is relative to the positioned parent or ancestor</h3>
      <h3>and is determined by the values of top, right, bottom, and left.</h3>
    </section>
    <section>
      <h2>Fixed Position</h2>
      
      <h3>The element is removed from the normal document flow.</h3>
      <h3>The final position is relative to the viewport and determined by the values of top, right, bottom, and left. </h3>
    </section>
  </body>
</html>

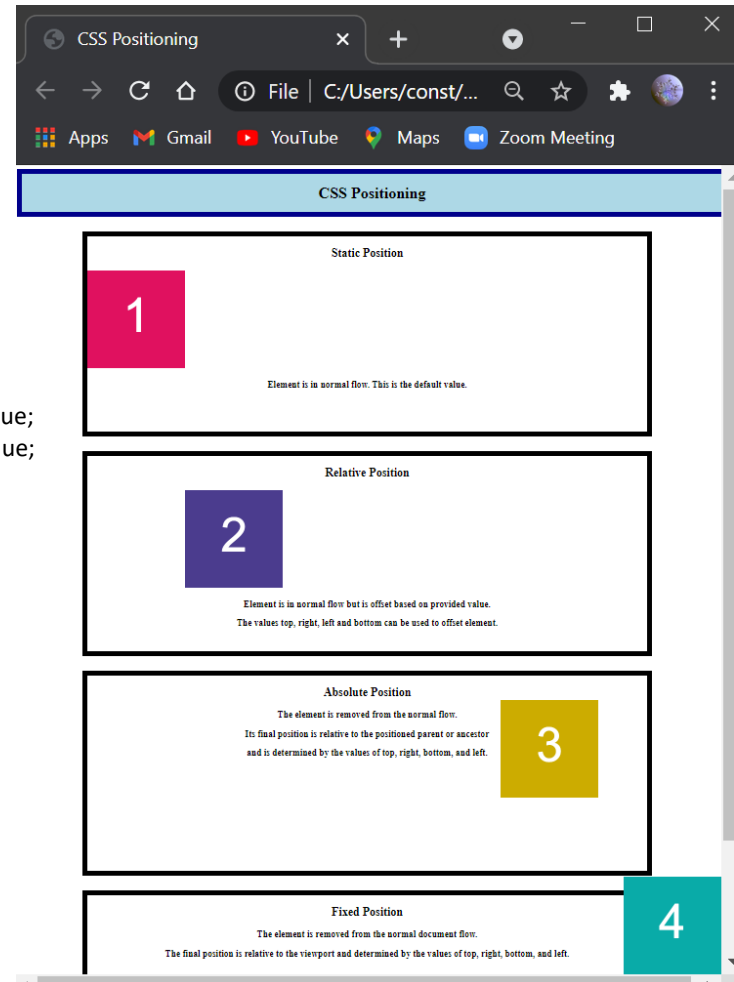
```

Positioning

```

h1, h2, h3 {
  text-align: center;
}
header {
  width: 100%;
  border: 10px solid darkblue;
  background-color: lightblue;
}
section {
  height: 400px;
  width: 80%;
  margin: 30px auto;
  border: 10px solid black;
}
/* Relative positioning */
#relative-box {
  position: relative;
  left: 200px;
}
/* Absolute positioning */
#absolute-section {
  position: relative;
}
#absolute-box {
  position: absolute;
  top: 50px;
  right: 100px;
}
/* Fixed positioning */
#fixed-box {
  position: fixed;
  bottom: 0;
  right: 0;
}

```



Readme.md

📄 Product Cards Run Off the Page

Work with a partner to resolve the following issues:

- * As a user, I want to view all products in two or more rows.
- * As a user, I don't want to scroll horizontally to see additional products.

Expected Behavior

Product cards that don't fit within the first row should display on the next row.

Actual Behavior

Product cards run off the page in a single row.

Assets

The following image demonstrates the web application's appearance:

![On an online store's webpage, products are spread over two stacked rows of three cards each.]
(./Images/01-product-grid.png)

📌 Hints

- * What additional flexbox properties could help direct the behavior of child elements?

🏆 Bonus

If you have completed the activity and want to further your knowledge, work through the following challenge with your partner:

- * By default, flexbox runs in rows, left to right. In what other directions could it run? Use [Google](https://www.google.com) or another search engine to research this.

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📄 Product Cards Run Off the Page

Work with a partner to resolve the following issues:

- As a user, I want to view all products in two or more rows.
- As a user, I don't want to scroll horizontally to see additional products.

Expected Behavior

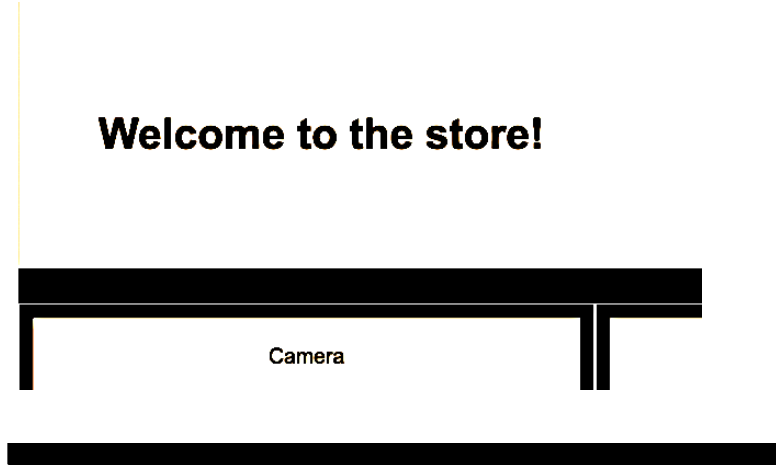
Product cards that don't fit within the first row should display on the next row.

Actual Behavior

Product cards run off the page in a single row.

Assets

The following image demonstrates the web application's appearance:



📌 Hints

- What additional flexbox properties could help direct the behavior of child elements?

🏆 Bonus

If you have completed the activity and want to further your knowledge, work through the following challenge with your partner:

- By default, flexbox runs in rows, left to right. In what other directions could it run?

Use [Google](#) or another search engine to research this.

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