

JS 3

Goals

1. access CSS and HTML in JS
2. CSS
 - 2.1. border for p
 - 2.2. :hover psuedo class to change background color of element
 - 2.3. width and height of element

NOTE: If we open something, we **MUST** close it. The slash (/) is used to close a tag.

```
<p id = "p2" > Hi </p>  
<h2 id = "subT"> Sub Item </h2>
```

=====

1.1. Write HTML Code in between `<body>` `</body>`. Remember, double quotation needed

```
<p id="p2">Hello World!</p>
```

Explanation of HTML Code

Inside the `<body>` `</body>`, write the paragraph tag and give it an id of "p2". The id is important because it gives the paragraph tag a name. Javascript code will then look for the name of "p2" and link up with it. The id allows HTML and Javascript code to link up with each other.

HTML Challenge

After the `<p id="p2">Hello World!</p>`, make another paragraph tag and give it an id of "IPara".

1.2. Write Javascript Code in between `<script>` `</script>`. ALSO, put the code below inside the `function main()`. Remember, double quotation needed

```
document.getElementById("p2").innerHTML = "hi";
```

Explanation of JS Code

Javascript code links up with HTML by searching for the id, which is "p2"

Your Javascript code finds the **EXACT** paragraph tag by using `document.getElementById()` to search for "p2". Next, we use `.innerHTML` to put new data in between the `<p>` `</p>` tag. In this case, we put "hi".

1.3. Run Code and see what happens

JS Challenge

In the HTML challenge, we created a second tag and then gave it an id of "IPara".

Use the example from above and make another line of JS code. However, this second JS code will link up with the second paragraph tag that you created in the HTML challenge. For this second line of JS code, assign the data "I'm second" to the `.innerHTML`

What if we want to change the look and feel of our website? We can style our website by using CSS (Cascading Style Sheet). How does CSS link up with HTML?

2.1. Write CSS Code in between `<style>` `</style>`. Curly braces { } and semi-colon (;) are important.

```
p#p2
{
    color: #ffd700;
}
```

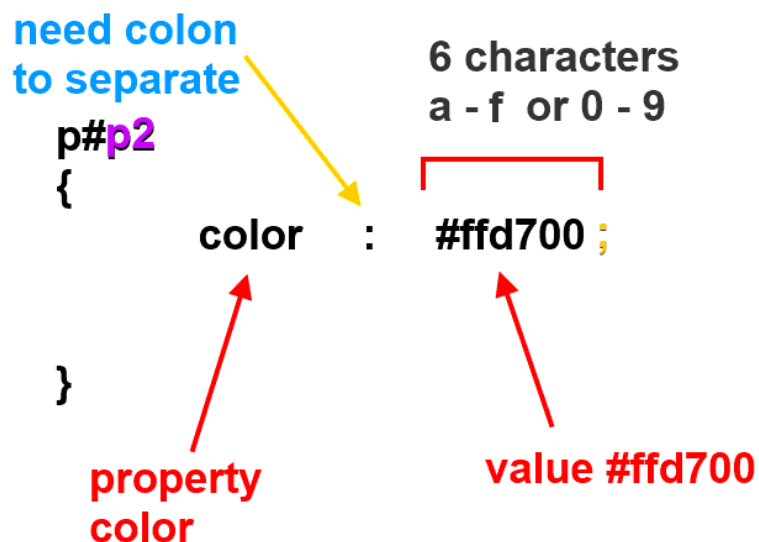
Explanation of CSS Code

In CSS, the hash tag (#) is used to represent the id of an HTML tag. Look back at our HTML code, we see that this specific paragraph tag has an id of "p2".

```
<p id="p2"> Hello World! </p>.
```

ONLY IN CSS, everytime you hear the word "id", replace it with the hash tag (#). Our paragraph tag has the id of "p2" and in CSS, this translate to p#p2.

Next, we use curly braces { } to group together lines of code and end the code using a semi-colon. The p#p2 has a property of color and a value of #ffd700;



2.2. Write CSS Code in between `<style>` `</style>`. Curly braces `{ }` and semi-colon `(;)` are important. Add the **green code** onto your CSS.

```
p#p2
{
    position    : relative;
    top        : 250px;
    left       : 150px;

    color      : #ffd700;
    font-size  : 35px;
}

p#p2:hover
{
    color      : #606060;
}

}
```

Explanation of CSS Code.

What if we want basic hover event? In CSS, we can signal a hover event by using the psuedo class called **:hover**. You can put this on every HTML element!!!

The code means that when we hover over the paragraph tag with id = "p2", the color of the text will change to #606060, which is charcoal black.

When we hover out, the color of the text will change back to the original color of #ffd700, which is yellow.

The position of top and left is used for the x and y coordinates. In the CSS code above, a positive "**left**" value moves right and a positive "**top**" values moves **DOWN**. That is correct, a positive "**top**" values moves **DOWN**.

Other styles you can apply are

```
border-bottom    : 2px solid #006400;
background-color  : #8f9a8f;
font-size        : 35px;
font-weight      : bold;
width            : 200px;
height          : 200px;
```

CSS Challenges

1. update the CSS code so that we use the id p#p1
 - 1.1. make the text color any color you like
2. when you **hover** over to p#p1
 - 2.1. the font-size goes up to 55px
 - 2.2. make it move to the left 50px
 - 2.3. make it move down 50px