LETSUPGRADE JAVASCRIPT ESSENTIALS

ASSIGNMENT 4

Q1) By how many ways we can access elements in the DOM and write about them in brief?

1.Accessing Elements by ID

The easiest way to access a single element in the DOM is by its unique [ID](https://developer.mozilla.org/en-US/docs/Web/API/Element/id). We can grab an element by ID with the [getElementById()](https://developer.mozilla.org/en-US/docs/Web/API/Document/getElementById) method of the document object.

document.getElementById();

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In order to be accessed by ID, the HTML element must have an id attribute. We have a div element with an ID of demo.

<div id="demo">Access me by ID</div>

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In the *Console*, let’s get the element and assign it to the demoId variable.

* const demoId = document.getElementById('demo');

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Logging demoId to the console will return our entire HTML element.

2.Accessing Elements by Class

The [class](https://developer.mozilla.org/en-US/docs/Web/HTML/Global_attributes/class) attribute is used to access one or more specific elements in the DOM. We can get all the elements with a given class name with the [getElementsByClassName()](https://developer.mozilla.org/en-US/docs/Web/API/Document/getElementsByClassName) method.

document.getElementsByClassName();

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Now we want to access more than one element, and in our example we have two elements with a demo class.

<div class="demo">Access me by class (1)</div>

<div class="demo">Access me by class (2)</div>

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Let’s access our elements in the *Console* and put them in a variable called demoClass.

* const demoClass = document.getElementsByClassName('demo');

3.Accessing Elements by Tag

A less specific way to access multiple elements on the page would be by its HTML tag name. We access an element by tag with the [getElementsByTagName()](https://developer.mozilla.org/en-US/docs/Web/API/Element/getElementsByTagName) method.

document.getElementsByTagName();

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For our tag example, we’re using article elements.

<article>Access me by tag (1)</article>

<article>Access me by tag (2)</article>

Just like accessing an element by its class, getElementsByTagName() will return an array-like object of elements, and we can modify every tag in the document with a for loop.

4.Query Selectors

document.querySelector();

document.querySelectorAll();

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To access a single element, we will use the [querySelector()](https://developer.mozilla.org/en-US/docs/Web/API/Document/querySelector) method. In our HTML file, we have a demo-query element

<div id="demo-query">Access me by query</div>

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The selector for an id attribute is the hash symbol (#). We can assign the element with the demo-query id to the demoQuery variable.

* const demoQuery = document.querySelector('#demo-query');

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In the case of a selector with multiple elements, such as a class or a tag, querySelector() will return the first element that matches the query. We can use the [querySelectorAll()](https://developer.mozilla.org/en-US/docs/Web/API/Document/querySelectorAll) method to collect all the elements that match a specific query.

Q2) Write a javascript program that will take 2 numbers from the HTML page and display them on the

HTML page after the addition of those 2 numbers.



