**JavaScript Basic & DOM Assignment**

1. **What is JavaScript?**

* JavaScript is the Programming Language for the Web.
* JavaScript can update and change both HTML and CSS.
* JavaScript can calculate, manipulate and validate data.
* JavaScript is a dynamic computer programming language.
* It is lightweight and most commonly used as a part of web pages, whose implementations allow client-side script to interact with the user and make dynamic pages.
* It is an interpreted programming language with object-oriented capabilities.

1. **What is the use of isNaN function?**

* In JavaScript NaN is short for "Not-a-Number".
* The isNaN() method returns true if a value is NaN.
* The isNaN() method converts the value to a number before testing it.
* It is different from the Number.isNaN() Method.

1. **What is negative Infinity?**

* The **Number.NEGATIVE\_INFINITY** property represents the negative Infinity value.
* Number.NEGATIVE\_INFINITY returns negative infinity.
* Number.NEGATIVE\_INFINITY is "a number lower than any other number".
* NEGATIVE\_INFINITY is a property of the JavaScript Number object.
* You can only use it as Number.NEGATIVE\_INFINITY.
* Using x.NEGATIVE\_INFINITY, where x is a variable, will return undefined:

Ex: let x = 100;  
 x.NEGATIVE\_INFINITY;

1. **Which company developed JavaScript?**

* **JavaScript** was invented by **Brendan Eich** in 1995.
* It was developed for **Netscape 2**, and became the **ECMA-262** standard in 1997.
* After Netscape handed JavaScript over to ECMA, the Mozilla foundation continued to develop JavaScript for the Firefox browser. Mozilla's latest version was 1.8.5. (Identical to ES5).
* It was originally named Mocha, but quickly became known as LiveScript and, later, JavaScript.

1. **What are undeclared and undefined variables?**

* [**Undefined**](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/undefined) variable means a variable has been declared but does not have a value.
* **Undeclared** variable means that the variable does not exist in the program at all.
* **Undeclared** occurs when a variable which hasn’t been declared using var, let or const is being tried to access.
* **Undefined** occurs when a variable has been declared using var, let or const but isn’t given a value.

1. **Write the code for adding new elements dynamically?**

* document.createElement("<*tagName*>");

// Where <*tag Name*> can be any HTML

// tagName like div, ul, button, etc.

// newDiv element has been created

For Eg:

**Let newDiv = document.createElement ("div");**

1. **What is the difference between View State and Session State?**

* **View State:** It is maintained at only one level that is page-level. Changes made on a single page is not visible on other pages.
* Information that is gathered in view state is stored for the clients only and cannot be transferred to any other place.
* View state is synonymous with serializable data only.
* View State has a tendency for the persistence of page-instance-specific data.
* **Session State:** It is maintained at session-level and data can be accessed across all pages in the web application.
* The information is stored within the server and can be accessed by any person that has access to the server where the information is stored.
* SessionState has the tendency for the persistence of user-specific data and is maintained on the server-side.

**8) What is === operator?**

* The strict equality operator ( === ) **checks whether its two operands are equal, returning a Boolean result**.
* Unlike the equality operator, the strict equality operator always considers operands of different types to be different.

1. **How can the style/class of an element be changed?**

* getElementById() method is used to return the element in the document with the “id” attribute and **the “className” attribute** can be used to change/append the class of the element.

**10)How to read and write a file using JavaScript?**

**Write File:-**

* After the File System file is imported then, the writeFile() operation is called.
* The writeFile() method is used to write into the file in JavaScript.
* The syntax of this method is as follows −

writeFile(path,inputData,callBackFunction)

**Read File: -**

* After the File System module is imported, the reading of the file in JavaScript can be done by using the readFile() function.
* The syntax to read from a file is as follows −
* readFile(path, format, callBackFunc)

**11) What are all the looping structures in JavaScript?**

* Loops can execute a block of code a number of times.
* for - loops through a block of code a number of times
* for/in - loops through the properties of an object
* for/of - loops through the values of an iterable object
* while - loops through a block of code while a specified condition is true
* do/while - also loops through a block of code while a specified condition is true

**12) How can you convert the string of any base to an integer in JavaScript?**

IIn JavaScript **[parseInt()](https://www.geeksforgeeks.org/javascript-parseint-function/)** function (or a method) is used to *convert the passed in string parameter or value to an integer value itself*.

his function returns an **integer** of base which is specified in second argument of **parseInt() function**.

JavaScript parseInt() function returns Nan( not a number) when the string doesn’t contain number.

**Syntax:**

parseInt(Value, radix)

**13) What is the function of the delete operator?**

* The **delete** operator removes a property from an object.
* If the property's value is an object and there are no more references to the object, the object held by that property is eventually released automatically.

## [Syntax](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Operators/delete#syntax):-

Delete object. Property

Delete object [property]

Object = the name of an object, or an expression evaluating to an object.

Property = the property to delete.

**14) What are all the types of Pop up boxes available in JavaScript?**

* JavaScript has three kind of popup boxes: Alert box, Confirm box, and Prompt box.

## **Alert Box:-**

* An alert box is often used if you want to make sure information comes through to the user.
* When an alert box pops up, the user will have to click "OK" to proceed.

## **Confirm Box:-**

* A confirm box is often used if you want the user to verify or accept something.
* When a confirm box pops up, the user will have to click either "OK" or "Cancel" to proceed.
* If the user clicks "OK", the box returns **true**. If the user clicks "Cancel", the box returns **false**.

## **Prompt Box:-**

* A prompt box is often used if you want the user to input a value before entering a page.
* When a prompt box pops up, the user will have to click either "OK" or "Cancel" to proceed after entering an input value.
* If the user clicks "OK" the box returns the input value. If the user clicks "Cancel" the box returns null.

**15) What is the use of Void (0)?**

* Using javascript: , you can run code that does not change the current page.
* This, used with void(0) means, **do nothing - don't reload, don't navigate, do not run any code**.
* The "Link" word is treated as a link by the browser.
* For example, it's focusable, but it doesn't navigate to a new page.

**16) How can a page be forced to load another page in JavaScript?**

* We can use ***[window.location](https://www.geeksforgeeks.org/javascript-window-location-and-document-location-objects/)*** property inside the *script* tag to forcefully load another page in Javascript.
* It is a reference to a Location object that is it represents the current location of the document.
* We can change the URL of a window by accessing it.

**Syntax:**

<script>

window.location = <Path / URL>

</script>

**Example:**

<script>

window.location = "https://www.geeksforgeeks.org/"

</script>

**17) What are the disadvantages of using innerHTML in JavaScript?**

* Event handlers attached to any DOM element are preserved.
* Replacement is done everywhere.
* It is not possible to append innerHTML.
* Breaks the document.
* Used for Cross-site Scripting
* The use of innerHTML very slow
* The process of using innerHTML is much slower as its contents as slowly built, also already parsed contents and elements are also re-parsed which takes time.