**Module: 4 (JavaScript Basic & DOM)**

1. **What is JavaScript?**

JavaScript is a lightweight, cross-platform, and interpreted compiled programming language which is also known as the scripting language for webpages. It is well-known for the development of web pages , many non-browser environments also use it. JavaScript can be used for Client-side developments as well as Server-side developments. JavaScript is both imperative and declarative type of language.

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

The isNaN () function determines whether a value is NaN when converted to a number. Because coercion inside the isNaN () function can be surprising, you may alternatively want to use Number.isNaN().

1. **What is negative Infinity?**

Number.negative\_infinity is a special numeric value that is returned when an arithmetic operation or mathematical function generates a negative value greater than the largest representable number in JavaScript (i.e., more negative than -number.max\_value).

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.

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

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.

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

document.createElement("<tagName>");

// Where <tagName> 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 ViewState and SessionState?**

* **ViewState**

ViewState is a client-side mechanism for managing state. ViewState is a specific type of data that only applies to the page where it is utilized.

It saves the data on the same page in encrypted format. Information that you want to access from the same web page is stored in ViewState. ViewState of one page cannot be accessed directly from another page. If you want to access a specific ViewState value, you can store it in the Context collection and then access it from another page.

* **SessionState**

Session State is a method for managing server-side state. When a new client first interacts with a Web application, a session ID is generated and associated with all subsequent requests from the same client for the duration of the session. It is used mainly for storing user specific data [session specific data]. The session value can be used for the whole session until the session expires or the user closes the session. The session value in accessible on all the pages.

When it comes to storing data on a browser, session storage is a popular option. It allows developers to save and retrieve various values. Session storage, as opposed to local storage, only keeps data for a single session. When the user closes the browser window, the data is cleared.

1. **What is === operator?**

The strict e quality (===) 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?**

There are two ways to do that:

1. Changing CSS with the help of the style property:
2. Changing the class itself – We can use two properties that can be used to manipulate the classes.

* The className Property: This property is used to set the current class of the element to the specified class.
* The classList Property: The classList is a read-only property that returns the CSS class names of an element as a DOM Token list object.

1. **How to read and write a file using JavaScript?**

The fs.readFile() and rs.writeFile() methods are used to read and write of a file using JavaScript. The file is read using the fs.readFile() function, which is an inbuilt method. This technique reads the full file into memory and stores it in a buffer.

1. **What are all the looping structures in JavaScript?**

The JavaScript loops are used toiterate the piece of code using for, while, do while or for-in loops. It makes the code compact. It is mostly used in array. There are four types of loops in JavaScript.

1. for loop
2. while loop
3. do-while loop
4. for-in loop
5. **How can you convert the string of any base to an integer in JavaScript?**

Following is the syntax that a user may use to convert a string into an integer value (of any base)-

parseInt(string\_value, base).

1. **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.

1. **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.

1. Alert Box

An alert box is often used if you want to make sure information comes through to the user.

1. Confirm Box

A confirm box is often used if you want the user to verify or accept something.

1. Prompt Box

A prompt box is often used if you want the user to input a value before entering a page.

1. **What is the use of Void (0)?**

The void operator is used to evaluate an expression and returns the undefined. Generally, this operator is used for obtaining the undefined primitive value. It is often used with hyperlinks. Usually, the browser refreshes the page or loads a new page on clicking a link. The javascript:void(0) can be used when we don't want to refresh or load a new page in the browser on clicking a hyperlink.

1. **How can a page be forced to load another page in JavaScript?**

We can use window.location 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.

1. **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.