**MODULE: 4**

**(JavaScript Basic & DOM)**

* **What is JavaScript?**
* **JavaScript is a dynamic computer programming language.**
* **JavaScript is the Programming Language for the Web.**
* **JavaScript can update and change both HTML and CSS.**
* **JavaScript can calculate, manipulate and validate data.**
* **What is the use of is NaN function?**
* **The JavaScript is NaN () Function is used to check whether a given value is an illegal number or not.**
* **It returns true if the value is a NaN else returns false. It is different from the Number is NaN () Method.**
* **What is the use of Void (0)?**
* **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.**
* **We can use the operand 0 in two ways that are void (0) or void 0. Both of the ways work the same.**
* **What is negative Infinity?**
* **NEGATIVE INFINITY is a property of the JavaScript Number Object.**
* **You can only use it as Number.NEGATIVE\_INFINITY.**
* **The negative infinity in JavaScript is a constant value that is used to represent a value that is the lowest available.**
* **This means that no other number is lesser than this value. It can be generated using a self-made function or by an arithmetic operation.**
* **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).**
* **What are undeclared and undefined variables?**
* **Undeclared variables are those that do not exist in a program and are not declared.**
* **If the program tries to read the value of an undeclared variable, then a runtime error is encountered.**
* **Undefined variables are those that are declared in the program but have not been given any value.**
* **If the program tries to read the value of an undefined variable, an undefined value is returned.**
* **Write the code for adding new elements dynamically?**
* **New elements can be dynamically created in JavaScript with the help of create Element () method.**
* **The attributes of the created element can be set using the set Attribute () method**.
* **What is the difference between ViewState and SessionState?**
* **ViewState: It is maintained at only one level that is page-level.**
* **The basic difference between these two is that the ViewState is to manage state at the client’s end, making state management easy for end-user.**
* **session state: It is only valid for type objects. Maintained at page level only.**
* **while SessionState manages state at the server’s end, making it easy to manage content from this end too.**
* **What is === operator?**
* **The strict equality (===) operator checks whether its two operands are equal, returning a Boolean result.**
* **Unlike the**[**equality**](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Operators/Equality)**operator, the strict equality operator always considers operands of different types to be different.**
* **How can the style/class of an element be changed?**
* **HTML document and the task is to change the style properties (CSS Properties) of an element dynamically with the help of JavaScript.**
* **Select the element whose style properties need to be changed.**
* **Use element.style property to set the style attribute of an element.**
* **Set the properties either by using bracket notation or dash notation.**
* **How to read and write a file using JavaScript?**
* **There are two ways :**

**1. Using JavaScript extensions (runs from JavaScript Editor)**

**2. Using a web page and ActiveX objects (Internet Explorer only)**

* **What are all the looping structures in JavaScript?**
* **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**
* **How can you convert the string of any base to an integer in JavaScript?**
* **Convert a string to an integer in JavaScript. In JavaScript parseInt () function is used to convert the string to an integer.**
* **This function returns an integer of base which is specified in second argument of parseInt () function.**
* **parseInt () function returns Nan ( not a number) when the string doesn’t contain number.**
* **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.**
* **Try it Syntax delete object.property delete object[property]**
* **What are all the types of Pop-up boxes available in JavaScript?**
* **popup boxes are used to display the message or notification to the user.**
* **There are three types of pop-up boxes in JavaScript namely Alert Box, Confirm Box, and Prompt Box.**
* **Alert Box: It is used when a warning message is needed to be produced.**
* **When the alert box is displayed to the user, the user needs to press ok and proceed.**
* **How can a page be forced to load another page in JavaScript?**
* **we can use window. location object to load another page in JavaScript.**
* **window.location is an object that holds all the information about the current document location (host, href, port, protocol etc.)**
* **What are the disadvantages of using innerHTML in JavaScript?**
* **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.**
* **Preserves event handlers attached to any DOM elements: The event handlers do not get attached to the new elements created by setting innerHTML automatically. To do so one has to keep track of the event handlers and attach it to new elements manually. This may cause a memory leak on some browsers.**
* **Content is replaced everywhere: Either you add, append, delete or modify contents on a webpage using innerHTML, all contents is replaced, also all the DOM nodes inside that element are reparsed and recreated.**
* **Appending to innerHTML is not supported: Usually, += is used for appending in JavaScript. But on appending to an Html tag using innerHTML, the whole tag is re-parsed.**