# MODULE:4 (JAVASCRIPT Basic & DOM)

**1) What is JavaScript?**

**Ans.**

**->** JavaScript is a scripting or programming language that allows you to implement complex things on web pages — every time a web page does more than just sit there and display static information for you to look at — displaying timely content updates, interactive maps, animated 2D/3D graphics, scrolling video jukeboxes, etc.

**->** JavaScript is a scripting, manipulating as well as a programming language, Java script is used in server side as well as client side to make web pages interactive. Java script is very easy to implement because it is integrated with HTML It is open and cross-platform.

**2) What is the use of is NaN function?**

Ans.

-> NaN is short for Not a Number. The is NaN () method returns true if a value is NaN. The is NaN () method converts the value to a Number before testing it.

-> NaN stands for Not a Number.is NaN () function is use to check whether the given variable is number data type or not.

**3)  What is negative Infinity?**

Ans.

-> Negative infinity is different from mathematical infinity in the following ways: Negative infinity results in 0 when divided by any other number. Negative infinity, when divided by any positive number (apart from positive infinity) is negative infinity.

-> NEGATIVE\_INFINITY is the same as the negative value of global objects infinity property.

**4) Which company developed JavaScript?**

Ans. JavaScript is a trademark of Oracle Corporation in the United States. It is used under license for technology invented and implemented by Netscape Communications and current entities such as the Mozilla Foundation.

-> Javascript is developed and updated to conform to ECMA-262 Edition 5 or later **by Brendan Eich** at **Netscape.**

**5) What are undeclared and undefined variables?**

Ans. An undefined variable is one that has been declared but does not have a value. An undeclared variable is one that does not exist in the programmer at all. What is undeclared variable in JavaScript? Undeclared is a variable that has not been properly declared using var or let.

-> Undeclared Variable: Undeclared Variable means the variable is not declared in the program.

-> Undefined Variable: Undefined Variable means the variable is declared but does not have any value.

**6) Write the code for adding new elements dynamically?**

Ans. 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. The examples given below would demonstrate this approach.

-> Example 1: In this example, a newly created element is added as a child to the parent element.

<html>

<body>

<script>

Function add()

{

   Var a=document. Create Element(“p”);

Var text=document. Create Text Node(“This is a new next node”);

1. append Child(text);

document. Get Element By Id (“first para”). Append Child(a);

}

</script>

 <p id="first para">first Para<p>

</body>

</html>

**7)** **What is the difference between View State and Session State?**

Ans. Storage the View state is stored within the page itself (in encrypted text), while the Session state is stored in the server. View state are not encrypted. They just look that way, but can be easily decoded. Session is used mainly for storing user specific data.

-> The basic difference between these two is that the View State is to manage state at the client’s end, making state management easy for end-user while Session State manages state at the server’s end, making it easy to manage content from this end too. View State: It is maintained at only one level that is page-level.

-> View State is to manage state at the client's end, making state management easy for end-user.

 -> Session State manages state at the server's end.

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

Ans.

-> The equality operator ( ==) checks whether its two operands are equal, returning a Boolean result. Unlike the strict equality operator, it attempts to convert and compare operands that are of different types. The source for this interactive example is stored in a GitHub repository.

**9)How can the style/class of an element be changed?**

Ans.

-> Given an 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 needs to be change. Use element. style property to set the style attribute of an element.

-> The document. () method is used to return the element in the document with the “id” attribute and the “class Name” attribute can be used to change/append the class of the element. document. Get Element By Id ('my Element'). Class Name = "my class"

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

Ans.

-> The read and write operations in a file can be done by using some commands. But the module which is required to perform these operations is to be imported. The required module is ‘fs’ which is called as File System module in JavaScript.

-> After the File System file is imported then, the write File () operation is called. The write File () method is used to write into the file in JavaScript.

-> File=f open (get String Path (),0), the function read () is use for f reading the content. Str=f read (file, f length(file))

-> The Function f write () is use to write contents to the file.

-> File=f open(“c:\filename.txt,4)-opens file for writing.

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

Ans. The JavaScript while loop iterates the elements for the infinite number of times. It should be used if number of iteration is not known. The syntax of while loop is given below. Let’s see the simple example of while loop in javascript. The JavaScript do while loop iterates the elements for the infinite number of times like while loop.

There are following types of loops in java script:

While loop: first checks the condition, if the condition is true then execute the loop until the given condition is true.

Do while loop: first execute loop at least once then checks the condition, and continue executing program until the condition becomes false

For loop: initialize the counter, checks the condition, then execute the block, and after that increment/decrement the counter.

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

Ans. 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.

By Using parseint(). It is use to convert the string passed in string parameter to the integer value.

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

Ans. 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.

Java script delete function removes property from an object.

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

Ans.

-> 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.

-> Generally, Popup boxes are 3 types: How do Popup Boxes work in JavaScript? The below following are the explanation for the popup boxes in java script:

Java script has three types of popup boxes

Alert Box, confirm box and Prompt Box

Alert Box: Alert box is often use when we 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.

Window. alert(“alert box is prompt”);

Confirm Box is often use if we want the user to verify or accept something.

Prompt Box is often use if we want the user to input a value before entering a page.

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

Ans. The java script: 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. The Java Script: void (0) tells the browser to "do nothing" i.e., prevents the browser from reloading or refreshing the page.

-> Void (0) means returning undefined (void) as a primitive value.

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

Ans. Create a file named index.html. Add a heading and two buttons to it. One button forcefully loads a page with a live URL and the other button loads a local HTML page. In the

We can use window. location property inside script tag to forcefully load another page in java script.

<script>

    window. location = <Path / URL>

</script>

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

Ans.  If you use inner HTML in JavaScript, the disadvantage is Content is replaced everywhere We cannot use it like "appending to inner HTML Even if you use +=like "inner HTML = inner HTML + 'html'" still the old content is replaced by html.

-> The use of inner HTML very slow: The process of using inner HTML is much slower as its contents as slowly built, also already parsed contents and elements are also re-parsed which takes time.

-> It is not possible to append inner HTML, Replacement is done everywhere, Breaks the document.

-> Used for cross site-scripting

-> When we have used the event handlers then the event handlers are not automatically attached to the new elements created by inner HTML.