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

**1. What is JavaScript ?**

**Ans :-** JavaScript is a dynamic Computer Programming Language.it is lightweight and Most Commonly used as part of web pages.

It is an interpreted programming language with object oriented capabilities.

JavaScript is used to make webpages interactive.

JavaScript Contain Standard library of object like array,Date and core set of language element like operator.

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

**Ans :-** NaN is a number that is not a legal number.

NaN is short for “Not-a-Number”.

The NaN() method return true if value is NaN.

The NaN() methoad converts the value to a number before testing it.

**3. What is Negative Infinity ?**

**Ans :-** JavaScript displays the NEGATIVE\_INFINITY value as-Infinity. The nagetive infinity is constant value which is used to represent a value which is the lowest Available.

Negative infinity results in 0 when divided by any other number.

When divided by itself or positive infinity, negative infinity return NaN

**4. Which Compony Developed JavaScript ?**

**Ans :-** JavaScript is develop by Netscape. JavaScript is a scripting language . it can be use to program web browser or even servers. It can dynamically update the content of webpage , which is the beauty of JavaScript.

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

**Ans :-** Undefined variables means a variable has been declared but does not have a value .

**Example :-**

var a ;

console.log(a);

**Output :-** undefined

**Undeclared :-** undeclared variable means that the variable does not exist in the program at all.

**Example :-**

Console.log(a);

Reference error : a is not defined

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

**Ans :-**

<!DOCTYPE html>

<html>

<head>

<meta charset=”UTF-8”>

<meta Http-equiv=”X-UA-Compatible” content=”IE=edge”>

<meta name=”viewport” content=”width-device-width, initial-scale=1.0”>

<title>Adding New Elements</title>

</head>

<script type="text/javascript">

function addNode() { var newP = document.createElement("p");

var textNode = document.createTextNode(" This is a new text node");

newP.appendChild(textNode); document.getElementById("firstP").appendChild (newP); }

</script>

</head>

<body> <p id="firstP">firstP<p> </body>

</html>

**7. What is the Deference between Viewstate and SessionState ?**

**Ans :-**

View state :-

View state can only be visible from single page and not multiple pages.

View state maintained at page level only.

Information stored on the client’s end only.

Session state:-

Session date value availability is across all pages available in a user session.

Maintained at session level.

Information is stored on the server.

**8. What is === operator ?**

**Ans :-** This is a strict equality operator. it checks whether its two operands are equal ,returning a Boolean result. Unlike the equality operator ,the strict equality operator always consider operands of different types to be different.

**9. How can the stayle/class of an element can be changed?**

**Ans :-**

The class name property :-

This property is used to set the current class of the element to the specified class.

Syntax :-

document.getElementById("id").className = class

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

**Ans :-** The file system module is imported the reading of the file in JavaScript done by using the readFile() function.

The syntax to read from a file is readFile(path,format,callBackFunc).

The file system file is imported then,the writeFile() operation is called. The writeFile() method is used to write into the File in JavaSript.

The syntax of this method is writeFile(path,inputData,callBackFunc)

**11. What are all the looping Structures in JavaScript ?**

**Ans :-** JavaScript supports different types of loops:

**for :-** Loops through a block of code a number of time.

**for/in :-** loops through a properties of an object.

**For/of :-** loops through the value of an iterable object.

**While :-** loops through a block of code while specified condition is true.

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

**Ans :-** to convert a string to an integer parselnt(),

number() and unary operator(+)function is used in JavaScript.

Parselnt() function returns Nan (not a number) when the string doesn’t contain number. If a string with a number is sent,then only that number will be returned as the output.This function will not accept spaces.

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

**Ans :-** The delete operator in JavaScript removes a given property from an object.

On Successful deletion,it will return true else false will be returned.

The syntax of using the delete operator is as follow:

delete object.property;  
// OR  
delete object["property"];

This is the object whose property we want to delete.

This is a property to be deleted.

**14. What are all the type of Pop up boxes available in JavaScript ?**

**Ans :-** In JavaScript pop up boxes are used to display the message or notification to the user.

There are three types of pop up box in JavaScript:

Alert box , Confirm box , prompt box

Synatax :-

alert(“your alert here”)

confirm(“your query here”)

prompt(“your prompt here”)

**15. What is the use of void(0)?**

**Ans :-** JavaScript void 0 means returning undefined (void) as a primitive value. You might come across the term “JavaScript:void(0)” while going through HTML documents.it is used to prevent any side effects caused while inserting an expression in a webpage.

* html

|  |
| --- |
| <!DOCTYPE html>  <**html lang=”en”**>    <**head**>  <meta charset=”UTF-8”>  <meta Http-equiv=”X-UA-Compatible” content=”IE=edge”>  <meta name=”viewport” content=”width-device-width, initial-scale=1.0”>  <**title**>JavaScript:void(0)</**title**>  </**head**>    <**body**>      <**center**>          <**h1** style="color:green">GeeksforGeeks</**h1**>          <**h3**>JavaScript:void(0)</**h3**>          <**a** href="javascript:void(0);"             ondblclick="alert('Welcome to Geeks for Geeks')">  Double click on me </**a**>      </**center**>  </**body**>    </**html**> |

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

**Ans :-**

* index.html

|  |
| --- |
| <!DOCTYPE html>  <**html** lang="en">    <**head**>      <**meta** charset="UTF-8">      <**meta** http-equiv="X-UA-Compatible"          content="IE=edge">      <**meta** name="viewport" content=          "width=device-width, initial-scale=1.0">  </**head**>    <**body**>      <**h3**>This is the original page</**h3**>      <**br**>        <**button** onclick="force\_load\_gfg()">          Force Load GFG Page      </**button**>      <**br**><**br**>        <**button** onclick="force\_load\_local()">          Force Load Local HTML page      </**button**>        <**script**>          function force\_load\_gfg() {              window.location =                  "<https://www.geeksforgeeks.org/>"          }            function force\_load\_local() {              window.location =                  "F:/gfg/PageRedirect/newPage.html"          }      </**script**>  </**body**>    </**html**> |

* Create a file named newpage.html.this is the local HTML page that would be loaded by javascript.
* newPage.html

|  |
| --- |
| <!DOCTYPE html>  <**html** lang="en">    <**head**>      <**meta** charset="UTF-8">      <**meta** http-equiv="X-UA-Compatible"          content="IE=edge">      <**meta** name="viewport" content=          "width=device-width, initial-scale=1.0">      <**title**> New Page </**title**>  </**head**>    <**body**>      <**h3**>This is the new loaded page</**h3**>  </**body**>    </**html**> |

**17. What are the disadvantages of innerHTML in JavaScript ?**

**Ans :-** Disadvantage of using innerHTML in JavaScript :

* Event handlers attaatched to any DOM element are preserved.
* Replacement is done everywhere.
* It is not possible to append innerHTML.
* Breaks the Document.
* The use of innerHTML is very slow.
* Can also be used for Cross-site scripting(xss)

Example :-

|  |
| --- |
| <!DOCTYPE html>  <**html**>    <**head**>  <meta charset=”UTF-8”>  <meta Http-equiv=”X-UA-Compatible” content=”IE=edge”>  <meta name=”viewport” content=”width-device-width, initial-scale=1.0”>      <**title**>          Using innerHTML in JavaScript      </**title**>  </**head**>    <**body** style="text-align: center">        <**h1** style="color:green">          GeeksforGeeks      </**h1**>        <**p** id="P">          A computer science          portal for geeks.      </**p**>        <**button** onclick="geek()">          Try it      </**button**>        <**p** id="p"></**p**>        <**script**>          function geek() {              var x = document.getElementById("P")                          .innerHTML;                document.getElementById("p")                          .innerHTML = x;                document.getElementById("p")                          .style.color = "green";          }      </**script**>  </**body**>    </**html**> |