**ASSIGNMENT**

**JAVASCRIPT**

**Q1.** What is JavaScript?

**ANS.** JavaScript is a scripting language used to create and control dynamic website content, i.e. anything that moves, refreshes, or otherwise changes on your screen without requiring you to manually reload a web page. Features like: animated graphics. photo slideshows.

**Q2.** What is the use of isNaN function?

**Ans.** The JavaScript isNaN() 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 isNaN() Method.

Syntax: isNaN( value )

Parameter Values: This method accepts a single parameter as mentioned above and described below:

1. value: It is a required value passed in the isNaN() function.
2. Return Value: It returns a Boolean value i.e. returns true if the value is NaN else returns false.

Q3. What is negative Infinity?Ans. 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.

**Syntax :** Number.NEGATIVE\_INFINITY

**Q4.** Which company developed JavaScript?**Ans.** JavaScript was created at Netscape Communications by Brendan Eich in 1995. Netscape and Eich designed JavaScript as a scripting language for use with the company's flagship web browser, Netscape Navigator.

**Q5.** What are undeclared and undefined variables?**Ans.** **Undeclared:** It occurs when we try to access any variable that is not initialized or declared earlier using the var or const keyword. If we use ‘typeof’ operator to get the value of an undeclared variable, we will face the runtime error with the return value as “undefined”. The scope of the undeclared variables is always global.

**Undefined:** It occurs when a variable has been declared but has not been assigned any value. Undefined is not a keyword.

**Q6.** Write the code for adding new elements dynamically?

**Ans.** <!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">

<style>

html,

body {

height: 100%;

width: 100%;

}

.button {

display: flex;

align-items: center;

justify-content: center;

}

.tasks {

display: flex;

justify-content: center;

align-items: center;

flex-direction: column;

margin-top: 20px;

}

</style>

</head>

<body>

<div class="button">

<button id="addTask">Add task</button>

</div>

<div class="tasks"></div>

<script type="text/javascript">

let task = document.getElementsByClassName("tasks");

let addTask = document.getElementById("addTask");

addTask.addEventListener('click', function () {

for (let i = 0; i < task.length; i++) {

let newDiv = document.createElement("div");

newDiv.setAttribute("class", "list");

newDiv.innerText = "New Div created";

task[i].append(newDiv);

}

})

</script>

</body>

</html>

**Q.7** What is the difference between ViewState and SessionState?

**Ans.**

|  |  |
| --- | --- |
| ViewState | SessionState |
| View state can only be visible from a single page and not multiple pages. | Session state value availability is across all pages available in a user session. |
| It will retain values in the event of a postback operation occurring. | In session state, user data remains in the server. |
| Information is stored on the client’s end only. | Information is stored on the server. |
| used to allow the persistence of page-instance-specific data. | used for the persistence of user-specific data on the server’s end. |
| ViewState values are lost/cleared when new page is loaded. | SessionState can be cleared by programmer or user or in case of timeouts. |
| It can be used to store information that you wish to access from same web page. | It can be used to store information that you wish to access on different web pages. |
| It is maintained at only one level that is page-level. | It has a tendency for the persistence of page-instance-specific data. |

**Q.8** What is === operator?**Ans.** Strict equality compares two values for equality. Neither value is implicitly converted to some other value before being compared. If the values have different types, the values are considered unequal.

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

**Ans**. The class name is used as a selector in HTML which helps to give some value to the element attributes. The document.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.

Syntax: document.getElementById('demo').className = "main";

**Q.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.

**Q.11** What are all the looping structures in JavaScript?

**Ans.** The statements for loops provided in JavaScript are:

* for statement
* do...while statement
* while statement
* labeled statement
* break statement
* continue statement

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

JavaScript?

**Ans.** In JavaScript, it’s quite common to find yourself with a number trapped inside a string. This can happen when you’re dealing with user input, reading data from a file, or working with a third-party API. But JavaScript provides several handy methods to free that number and convert it into an integer. This is super useful when you need to do some math or comparisons with those numbers.

The parseInt() method accepts the string and radix parameter and converts it into an integer.

**Syntax:** parseInt( Value, radix )

**Q.13** What is the function of the delete operator?**Ans.** The delete operator in JavaScript is used to remove a property from an object. It works for both properties owned by the object and those inherited from prototypes. When used on an array item, it creates a 'hole' in the array. Parameter: It does not take any parameters.

**Q.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:

Alert Box

Prompt Box

Confirm Box

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

**Ans.** In JavaScript, javascript:void(0) is a pseudo-URL that does nothing when clicked. It's commonly used as a placeholder in href attributes to prevent the browser from navigating to a new page while still executing JavaScript code.

**Q.16** How can a page be forced to load another page in JavaScript?**Ans.** In JavaScript, you can force a page to load another page by using the window.location object. There are a few methods to achieve this. To force a page to load another page in JavaScript, we have multiple approaches:

Below are the approaches used to force a page to load another page in JavaScript:

Using window.location.replace

Using window.location.assign Property

**Q.17** What are the disadvantages of using innerHTML in JavaScript?**Ans**. There is no append support without reparsing the whole innerHTML. This makes changing innerHTML directly very slow. innerHTML does not provide validation and therefore we can potentially insert valid and broken HTML in the document and break it.