

WD-ASSIGNMENT(3)

MODULE: 4 (JavaScript Basic & DOM)

Q1. What is JavaScript?

A1. JavaScript is a dynamic computer programming language. It is lightweight and most used as a part of web pages, whose implementations allow client-side script to interact with the user and make dynamic pages. It is an interpreted programming language with object-oriented capabilities.

Q2. What is the use of isNaN function?

A2. In JavaScript NaN is short for "Not-a-Number".

The isNaN() method returns true if a value is NaN.

The isNaN() method converts the value to a number before testing it

Q3. What is negative Infinity?

A3. 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.

Q4. Which company developed JavaScript?

A4. 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.

Q5. What are undeclared and undefined variables?

A5. Undefined: It occurs when a variable has been declared but has not been assigned any value. Undefined is not a keyword. Undeclared: It occurs when we try to access any variable that is not initialized or declared earlier using the var or const keyword.

Q6. Write the code for adding new elements dynamically?

A6. Creation of new element: New elements can be created in JS by using the createElement() method.

Syntax:

```
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");
```

Q7. What is the difference between ViewState and SessionState?

A7. Session state is saved on the server, ViewState is saved in the page. Session state is usually cleared after a period of inactivity from the user (no request happened containing the session id in the request cookies). The view state is posted on subsequent post back in a hidden field.

Q8. What is === operator?

A8. The strict equality (===) 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.

Q9. How can the style/class of an element be changed?

A9. We can change, add or remove any CSS property from an HTML element on the occurrence of any event with the help of JavaScript. There are two common approaches that allow us to achieve this task.

Style.property document.getElementById("id").style.property = new_style

Changing the class itself document.getElementById("id").classList

Q10. How to read and write a file using JavaScript?

A10. Syntax: writeFile(path,inputData,callbackFunction)

Path – The first parameter is the path of the file or the name of the file into which the input data is to be written.

If there is a file already, then the contents in the file are deleted and the input which is given by the user will get updated or if the file is not present, then the file with that will be created in the given path and the input information is written into it.

inputData – The second parameter is the input data which contains the data to be written in the file that is opened.

callbackFunction – The third parameter is the function which is the call back function which takes the error as the parameter and shows the fault if the write operation fails.

Q11. What are all the looping structures in JavaScript?

A11. 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

Q12. How can you convert the string of any base to an integer in JavaScript?

A12. To convert a string to an integer parseInt(), Number(), and Unary operator(+) function is used in javascript. parseInt() 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.

Q13. What is the function of the delete operator?

A13. 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.

Q14. What are all the types of Pop up boxes available in JavaScript?

A14. JavaScript has three kind of popup boxes: Alert box, Confirm box, and Prompt box.

Q15. What is the use of Void (0)?

A15. void is an important keyword in JavaScript which can be used as a unary operator that appears before its single operand, which may be of any type. This operator specifies an expression to be evaluated without returning a value.

Q16. How can a page be forced to load another page in JavaScript?

A16. JavaScript, we can use window. location object to force a page to load another page. We can use the location object to set the URL of a new page

Q17. What are the disadvantages of using innerHTML in JavaScript?

Disadvantages of using innerHTML property in JavaScript:

The use of innerHTML very slow: The process of using innerHTML is much slower as its contents are 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 are 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.