

Assignment

MODULE: 4 (JavaScript Basic & DOM)

1) What is JavaScript?

Ans: JavaScript is the most popular web scripting language, used for both client-side and server-side development. Supporting object-oriented programming abilities, the JavaScript code can be inserted into HTML pages that can be understood and executed by web browsers.

JavaScript contains a standard library of object like array, date and math and core set of language element like operator, control, structure and statements.

2) What is the use of is NAN function?

Ans: The JavaScript `isNaN()` function can be utilized to check whether a value is NAN (Not a Number) or not. It returns the `True` if the value is not a number else return `false`.

3) What is Negative Infinity?

Ans: Negative Infinity is a special numeric value that is returned when an arithmetic operation or mathematical function **generates a** negative value greater than the largest representable number in JavaScript

4) Which company developed JavaScript?

Ans: JavaScript was invented by **Brendan Eich** in 1995. It was developed for Netscape 2, and became the ECMA-262 standard in 1997.

5) 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"**.

Example Undeclared:

```
Consol.log(y);    //where y is not declared above
```

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

Example Undefined:

```
Let y;
```

```
Consol.log(y);    //where y is declared above but didn't assigned any number
```

6) Write the code for adding new elements dynamically?

Ans: 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");

7) What is difference between ViewState and SessionState?

Ans: 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 while SessionState manages state at the server's end, making it easy to manage content from this end too.

8) What is === operator?

Ans: In JavaScript === (Triple equals) is a strict equality comparison operator in JavaScript, which returns false for the values which are not of a similar type. This operator performs type casting for equality. If we compare 2 with “2” using ===, then it will return a false value.

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

Ans: 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.

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

Ans: **Write operation on a file:**

After the File System file is imported then, the writeFile() operation is called. The writeFile() method is used to write into the file in JavaScript. The syntax of this method is as follows :-

writeFile(path, inputData, callBackFunction)

The writeFile() function accepts three parameters :-

- **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.
- **CallbackFuntion**:- 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.

Reading from the file:-

After the File System module is imported, the reading of the file in JavaScript can be done by using the readFile() function.

The syntax to read from a file is as follows –

readFile(path, format, callbackFunc)

The readFile() function accepts three parameters including one optional parameter.

- **Path**:- The first parameter is the path of the test file from which the contents are to read. If the current location or directory is the same directory where the file which is to be opened and read is located then, only the file name has to be given.
- **Format**:- The second parameter is the optional parameter which is the format of the text file. The format can be ASCII, utf-8 etc.
- **CallbackFunc**:- The third parameter is the call back function which takes the error as the parameter and displays the fault is any raised due to the error.

11) What are the looping structures in JavaScript ?

Ans: JavaScript supports different kinds of loops:

- **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

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

Ans: In JavaScript `parseInt` function (or a method) is used to convert the passed-in string parameter or value to an integer value itself. This function returns an integer of the base which is specified in the second argument of the `parseInt()` function.

Syntax:

`parseInt(Value, radix)`

13) What is the function of the delete operator?

Ans: The delete function is used on object properties. It deletes both value of property and property itself.

Example code:

```
Var person = {  
    firstName:"Kunal",  
    lastName:"Patel",  
    age:23,  
};  
delete person.age; // or delete person["age"];  
it will shows person age is undefined.
```

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

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

Alert Box: An alert box is often used if you 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.

Confirm Box: A confirm box is often used if you want the user to verify or accept something. When a confirm box pops up, the user will have to click either "OK" or "Cancel" to proceed. If the user clicks "OK", the box returns **true**. If the user clicks "Cancel", the box returns **false**.

Prompt Box: A prompt box is often used if you want the user to input a value before entering a page. When a prompt box pops up, the user will have to click either "OK" or "Cancel" to proceed after entering an input value. If the user clicks "OK" the box returns the input value. If the user clicks "Cancel" the box returns null.

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

Ans: void(0)” is similar to void. Javascript: void(0) means return undefined as a primitive value. We use this to prevent any negative effects on a webpage when we insert some expression.

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

Ans: We can use window.location property inside the script tag to forcefully load another page in Javascript. It is a reference to a Location object that is it represents the current location of the document. We can change the URL of a window by accessing it.

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

Ans: Disadvantages of innerHTML:

- Event handlers attached to any DOM element are preserved.
- Replacement is done everywhere.
- It is not possible to append innerHTML.
- Breaks the document.
- Used for Cross-site Scripting.