

Module (JAVASCRIPT BASIC & DOM) – 4

1.What is JavaScript?

=> JavaScript is a scripting language for creating dynamic web page content. It creates elements for improving site visitors' interaction with web pages, such as dropdown menus, animated graphics, and dynamic background colors.

2.What is the use of isNaN function?

=>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.

3.What is negative Infinity?

=>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?

=>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. Mozilla's latest version was 1.8.5.

5.What are undeclared and undefined variables?

=>Undeclared variables are those that have not been declared or defined in the current scope, while undefined variables are those that have been declared but not given a value.

6. Write the code for adding new elements dynamically?

=> New elements can be dynamically created in JavaScript with the help of `createElement()` method. The attributes of the created element can be set using the `setAttribute()` method. The examples given below would demonstrate this approach.

```
- 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");
```

```
Ex. <script>
```

```
let p = document.createElement("p");
```

```
const newtext = document.createTextNode("text");
```

```
p.appendChild(newtext);
```

```
</script>
```

7. What is the difference between ViewState and SessionState?

=> 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.

8. What is === operator?

=> === is used for comparing two variables, but this operator also checks datatype and compares two values.

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

=> 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.

```
Ex. document.getElementById('myElement').className = "myclass"; or
```

```
document.getElementById("myText").style.fontSize = '20';
```

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

=>The `fs.readFile()` and `fs.writeFile()` methods are used to read and write of a file using javascript.

The file is read using the `fs.readFile()` function. which is an inbuilt method. This technique reads the full file into memory and stores it in a buffer.

Ex. `fs.readFile(file_name, encoding, callback_function)`

The `fs.writeFile()` function is used to write data to a file in an asynchronous manner. If the file already exists, it will be replaced.

Ex. `fs.writeFile(file_name, data, options, callback)`

11. What are all the looping structures in JavaScript?

=>JavaScript supports different kinds of loops:

- 1.for - loops through a block of code a number of time
- 2.for/in - loops through the properties of an object
- 3.for/of - loops through the values of an iterable object
- 4.while - loops through a block of code while a specified condition is true
- 5.do/while - also loops through a block of code while a specified condition is true
6. `forEach` -`forEach()` method calls a function and iterates over the elements of an array.

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

=> 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.

13.What is the function of the 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.

Ex- const Employee = { firstname: 'John', lastname: 'Doe'};

console.log(Employee.firstname);

// Expected output: "John"

delete Employee.firstname;

console.log(Employee.firstname);

// Expected output: undefined

14.What are all the types of Pop up boxes available 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.**

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

=>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 web page.

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

=>In 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.²³

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

=>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.