

Assignment-3

1. What is JavaScript?

Ans. Javascript is a scripting language that is mainly used to make any website huge and interactive. It is the most used programming language in the world, used as the client-side programming language by approx 95.5.0% of all websites.

2. What is the use of isNaN function?

Ans. This function returns the True if the value is not a number else return false. Javascript isNaN() function is used to see whether a given value is a valid number or not a number.

3. What is negative Infinity?

Ans. Negative infinity is a constant value that is used to represent the lowest value of all. This means that there is no other value less than this value. When an arithmetic operation or math function produces a negative value greater than the largest representable number in javascript at that time negative infinity has a special value to be returned.

4. Which company developed JavaScript?

Ans. Javascript was originally known as LiveScript. It was developed by Netscape in the mid-nineties. Brendon Eich created the Netscape company that developed the world's full featured web browser.

Sun Microsystems, the creator of the widely popular Java language and an investor in Netscape, wanted the new LiveScript to be called JavaScript because they thought it would also bring Java to prominence.

5. What are undeclared and undefined variables?

Ans. Undeclared Variables are those Variables which are not written with let, var or const. It will throw a reference error if we try to access them in the code execution phase.

Example undeclared:

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

Undefined Variables are those which are declared with let, var or const but ain't assigned with value. It will throw undefined as value if we try to access them in the code execution phase.

Example undefined:

```
let y;
```

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

6. Write the code for adding new elements dynamically?

Ans.

<https://github.com/Parth12011999/JAVASCRIPT/blob/5a47b56d8e20a59aae33d7fe7a564935ddc4ba03/DynamicAddElement.html>

7. What is the difference between ViewState and SessionState?

Ans. The basic difference between the two is that ViewState manages state at the client end, which makes state management easier and quicker for the end-user while SessionState manages state at the server end, making it easier to manage content from this end as well.

1. Viewstate: It is maintained at only one level which is page-level. Changes on other pages will not be visible if changes on one page had been done. Information stored in ViewState is stored only for clients and may not be transferred to any other location. Viewstate is simply a synonym for serializable data.

2. SessionState: It is maintained at session-level and data can be accessed across all pages in the web application. Any individual person can access but if only they have access this server and get the information stored within the server.

8. What is === operator?

Ans. === is the strict equality operator in Javascript. It is used to compare two variables and check their value and data type. Returns a Boolean result (True or False) if the data types and values of the two variables match.

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

Ans. getElementsByclassName() method is used to return the element in the document with the “className” attribute and the “id” 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 file path or file name to which the input data is to be written. If the file already exists, the contents of the file are deleted and the user-supplied input will be updated, or if the file is not present, the corresponding file will be created at the given path and input. The information is written in it.
- inputData – It contains the data to be written in the file that is opened.

- **callBackFuntion** – The third parameter is the call back function which takes the error as the parameter and shows the mistake if the write operation fails.

Reading from the file:

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

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. Only the file name has to be given, if the current location or directory is the same directory where the file which is to be opened and read is located.
- **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 takes the error as the parameter and displays the fault if any is raised due to the error.

11.What are all 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 correct.

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

Ans. The parseInt() function is used to convert an arbitrary radix string to an integer in JavaScript. This function returns the radix integer that is specified in the second argument of the parseInt() function.

parseInt(string, radix)

A radix parameter specifies the number system to use:

2 = binary, 8 = octal, 10 = decimal, 16 = hexadecimal.

If radix is omitted, JavaScript assumes radix 10. If the value begins with "0x", JavaScript assumes radix 16.

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:"Parth",  
  lastName:"Shinde",  
  age:23,  
};
```

```
delete person.age; // or delete person["age"];
```

it will shows person age is undefined.

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

Ans. JavaScript has three types of pop-up boxes:

- **Alert Box:** The alert box is used to display a message to the user. It contains a message and an OK button.

- **Confirm Box:** The confirm box is used to ask the user for confirmation before taking an action. It contains a message, a Cancel button, and an OK button. A confirm box is used if you want the user to verify or accept something. When the box pops up, the user will have to press either "OK" or "CANCEL" to proceed. If the user presses "OK" it returns true or if the user presses "CANCEL" it returns false. (window.confirm();).
- **Prompt Box :** The prompt box is used to get input from the user. It contains a message, a text input field, a Cancel button, and an OK button. 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. (window.prompt();).

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

Ans. In JavaScript, void(0) is an expression that evaluates to undefined. The void operator takes an argument and returns undefined. In this case, the argument is 0, which has no effect on the expression. We use this to prevent any negative effects on a weird page when we insert some expression.

For example, in the case of URL hyperlinks. Hyperlinks open by reloading the page when the user clicks on the link. Javascript is used when you need to run some other code

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

Ans. In JavaScript, you can use the window.location object to load a new page. The window.location object contains information about the current URL and provides methods to navigate to a new URL. It is a reference to a Location object that represents the current location of the document. By accessing it we can change the URL of the window.

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

Ans. Performance: Manipulating the innerHTML property can be slower than other DOM manipulation techniques, especially for larger HTML content. This is because setting innerHTML causes the browser to re-parse and re-render the entire content of the affected element.

Accessibility: Manipulating innerHTML can also cause accessibility issues if it is used to dynamically modify important page content, such as headings, links, or form elements. This can make it difficult or impossible for users with disabilities to navigate or interact with the page.

Event listeners: If an element has event listeners attached to it, replacing its innerHTML property can remove those event listeners and cause unexpected behavior.

Code maintainability: Manipulating innerHTML can also make code harder to maintain, as it mixes HTML markup with JavaScript code. This can make it difficult to debug or modify the code in the future.