Assignment-3

1. What is JavaScript?

Ans. Javascript is a scripting language mainly used to make any website dynamic and interactive. It is the most used programming language in the world, used as a client-side programming language by 97.0% of all websites.

2. What is the use of isNaN function?

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

3. What is negative Infinity?

Ans. The Negative infinity is a constant value that is used to represent a value lowest of all. This means there is no other value lesser than this value. Negative infinity is a special numeric value that is returned when 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 initially known as **LiveScript.** It was developed by Netscape in mid nineties. Netscape was the company which developed world's full fledged web browser and the creator was brendon Eich.

Sun Microsystems, creator of the widely popular Java language and investor in Netscape and wanted the new LiveScript to be named as JavaScript as they thought it would also drag Java towards fame.

5. What are undeclared and undefined variables?

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

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 assign with value. If we try to access them in the code execution phase then will throw undefined as value.

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 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.

ViewState: It is maintained at only one level that is page-level. Changes made on a single page is not visible on other pages. Information that is gathered in view state is stored for the clients only and cannot be transferred to any other place. View state is synonymous with serializable data only.

SessionState: It is maintained at session-level and data can be accessed across all pages in the web application. The information is stored within the server

and can be accessed by any person that has access to the server where the information is stored.

8. What is === operator?

Ans. In Javascript === is strict equality operator. Used to compare two variable and check both value and datatype. If both datatypes and value matches of two variables it will return Boolean result (True or False).

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

Ans. gettElementByclassName() 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 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 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 true

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

Ans. parseInt() function is used to convert the string of any base to an integer in JavaScript. This function returns an **integer** of the base which 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:** An alert box is used if you want to make sure information is comes through to the user. When an alert box pop up, user will have to press "OK" to proceed. (window.alert();).
- **Confirm Box:** A confirm box is used if you want the user to verify or accept something. When confirm box pop up, user will have to press either "OK" or "CANCEL" to proceed. If the user press "OK" it returns true or if the user press "CANCEL" it returns false.(window.confirm();).
- **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. (window.prompt();).

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

Ans. Void means nothing. In a JavaScript Void(0) also similar to its meaning. It means returns undefined as a primitive value. We use this to prevent any negative effects on a webpage 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. When you need to run some other code in such cases, you can use javascript: void(0).

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.

- **The use of innerHTML very slow:** The process of using innerHTML is much slower as its contents as slowly built, also already parsed contents and elements are also re-parsed which takes time.
- **Content is replaced everywhere:** Either you add, append, delete or modify contents on a webpage using innerHTML, all contents is replaced, also all the DOM nodes inside that element are reparsed and recreated.
- **Can break the document:** There is no proper validation provided by innerHTML, so any valid HTML code can be used. This may break the document of JavaScript. Even broken HTML can be used, which may lead to unexpected problems.