**Module (JAVASCRIPT BASIC & DOM) – 4**

Q1) What is JavaScript?

Ans) JavaScript is a scripting or programming language that allows you to implement complex features on web pages every time a web page does more than just sit there and display static information for you to look a displaying timely content updates, interactive maps, animated 2D/3D graphics, scrolling video jukeboxes, etc.

Q2) What is the use of isNaN function?

Ans) The isNaN() function is used to check whether a given value is an illegal number or not. It returns true if value is a NaN else returns false. It is different from the Number.isNaN() Method.

Syntax:

isNaN( value )

value: It is a required value passed in the isNaN() function.

Return Value: It returns a Boolean value i.e. returns true if the value is NaN else returns false.

Q3) What is negative Infinity?

Ans) The negative infinity in JavaScript is a constant value which is used to represent a value which 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.

JavaScript shows the NEGATIVE\_INFINITY value as -Infinity.

Q4) Which company developed JavaScript?

Ans) The first ever JavaScript was created by Brendan Eich at Netscape, and has since been updated to conform to ECMA-262 Edition 5 and later versions.

Q5) What are undeclared and undefined variables?

Ans) Undefined variable means a variable has been declared but it does not have a value.

Undeclared variable means that the variable does not exist in the program at all.

Q7) What is the difference between ViewState and SessionState?

Ans)

| ViewState | SessionState |
| --- | --- |
| Maintained at page level only. | Maintained at session level. |
| View state can only be visible from a single page and not multiple pages. | Session state value availability is across all pages available in a user session. |
| It will retain values in the event of a postback operation occurring. | In session state, user data remains in the server. Data is available to user until the browser is closed or there is session expiration. |
| Information is stored on the client’s end only. | Information is stored on the server. |
| used to allow the persistence of page-instance-specific data. | used for the persistence of user-specific data on the server’s end. |
| ViewState values are lost/cleared when new page is loaded. | SessionState can be cleared by programmer or user or in case of timeouts. |

Q8) What is === operator?

Ans) the ‘===’ operator tests for strict equality i.e it will not do the type conversion hence if the two values are not of the same type, when compared, it will return false.

Ex: <script>

// In R.H.S. string "9" is converted into

// number 9, hence returns true.

document.write(9 == "9");

// used for next line

document.write('<br>')

// Here no type conversion takes place,

// hence returns false

document.write(9 === "9");

</script>

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

Ans) Files can be read and written by using java script functions – fopen(),fread() and fwrite().

The function fopen() takes two parameters – 1. Path and 2. Mode (0 for reading and 3 for writing). The fopen() function returns -1, if the file is successfully opened.

Ex: file=fopen(getScriptPath(),0);

The function fread() is used for reading the file content.

Ex: str = fread(file,flength(file));

The function fwrite() is used to write the contents to the file.

Ex(): file = fopen("c:\MyFile.txt", 3);// opens the file for writing

fwrite(file, str);// str is the content that is to be written into the file.

Q11) What are all the looping structures in JavaScript?

Ans) while loop: A while loop is a control flow statement that allows code to be executed repeatedly based on a given Boolean condition. The while loop can be thought of as a repeating if statement.

Syntax :

while (boolean condition)

{

loop statements...

}

for loop: for loop provides a concise way of writing the loop structure. Unlike a while loop, a for statement consumes the initialization, condition, and increment/decrement in one line thereby providing a shorter, easy-to-debug structure of looping. Syntax:

for (initialization condition; testing condition;

increment/decrement)

{

statement(s)

}

do-while: do-while loop is similar to the while loop with the only difference that it checks for the condition after executing the statements, and therefore is an example of an Exit Control Loop. Syntax:

do

{

statements..

}

while (condition);

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

Ans) <html>

<body>

<script>

var a = "10";

var b = parseInt(a);

document.write("value is " + b);

var c = parseInt("423-0-567");

document.write("</br>");

document.write('value is ' + c);

document.write("</br>");

var d = "string";

var e = parseInt(d);

document.write("value is " + e);

document.write("</br>");

var f = parseInt("2string");

document.write("value is " + f);

</script>

</body>

</html>

Q13) What is the function of the delete operator?

Ans) The delete operator deletes an object, an object's property, or an element from an array. The operator can also delete variables which are not declared with the var statement.

Syntax

delete objectName

delete objectName.property

delete objectName[index]

delete property // The command acts only within a with statement.

const Employee = {

firstname: 'John',

lastname: 'Doe'

};

console.log(Employee.firstname);

delete Employee.firstname;

console.log(Employee.firstname);

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

Ans) 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.

Syntax

window.alert("sometext");

The window.alert() method can be written without the window prefix.

Example

alert("I am an alert 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.

Syntax

window.confirm("sometext");

The window.confirm() method can be written without the window prefix.

Example

if (confirm("Press a button!")) {

txt = "You pressed OK!";

} else {

txt = "You pressed Cancel!";

}

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.

Syntax

window.prompt("sometext","defaultText");

The window.prompt() method can be written without the window prefix.

Example

let person = prompt("Please enter your name", "Harry Potter");

let text;

if (person == null || person == "") {

text = "User cancelled the prompt.";

} else {

text = "Hello " + person + "! How are you today?";

}

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

Ans) avaScript 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. For instance, URLs or hyperlinks are the common examples of using JavaScript void 0. Suppose you insert a link and want to call some JavaScript through it. Usually, when you click on a link, the browser will either reload or open a new page. However, if you just want to call JavaScript through that link, you would not want the entire page to refresh. This is where the JavaScript:void(0) will come in handy.

Q16) 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.

Syntax:

<script>

window.location = <Path / URL>

</script>

Example:

<script>

window.location = "https://www.suginfo.org/"

</script>

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

Ans) Content is replaced everywhere

We cannot use like 'appending to innerHTML'

Even if you use +=like 'innerHTML = innerHTML + 'html'' still the old content is replaced by html

The entire innerHTML content is re-parsed and builds into elements, therefore its much slower

The innerHTML does not provide validation and therefore we can potentially insert valid and broken HTML in the document and break it