

MODULE 4: (JAVASCRIPT Basic & DOM)

(1)What is Javascript?

- Javascript is a scripting language.
- Also known as object based scripting language.
- Javascript also called typescript.

(2)What is the use of isNaN function?

- isNaN function means Not-a-Number.
- isNaN() function is used to check whether a given value is an illegal number or not.
- It returns true if the value is isNaN() else return false.

Syntax :

isNaN(value)

(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(i.e. more negative than number.MAX-VALUE).
- Javascript displays the negative infinity value as -Infinity.

(4)Which company developed javascript?

- Javascript was invented by Brendan Eich in 1995.It was developed for Netscape 2 & became the ECMA-262 standard in 1997.

(5)What are undeclared & undefined variables?

- Undeclared variables are those that have not been declared or defined in current scope.
- Undefined variables are those that have been declared but not given a value.

(6)Write the code for adding new elements dynamically?

```
<html>
<title>adding new element dynamically</title>

<body>
    <button id="button">Hit Me</button>
    <h3 id="heading_A"></h3>
    <h5 id="alert"></h5>

    <script>
        const button=document.getElementById('button');
        const text=document.getElementById('heading_A');
        const alrt=document.getElementById('alert');
        button.onclick = () => {
            const name=prompt('what is your name?');
            const course= prompt('what course we are
            learning?');
            alert(`Hello ${name}, Welcome to our group..!`+ "\n"
            + `we are learning ${course}`);
            text.textContent=`Welcome ${name} to our group..!
            + `We are learning ${course}`;
            alert(button.textContent);
            text.textContent=`Welcome ${name} to our group..!
            + `We are learning ${course}`;
        }
    </script>
</body>

</html>
```

(7)What is the difference between ViewState & SessionState?

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. It will retain values in the event of a postback operation occurring.	Session state value availability is across all pages available in a user session. 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. used to allow the persistence of page-instance-specific data. ViewState values are lost/cleared when new page is loaded.	Information is stored on the server. used for the persistence of user-specific data on the server's end. SessionState can be cleared by programmer or user or in case of timeouts.

(8)What is === operator?

- === is a strict equality operator.
- === is used for comparing two variables but this operator also checks datatype & compares two values.

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

- `div1.style.fontSize = "2rem";`
- `div2.style.backgroundColor = "silver";`

(10)How to read & write a file using javascript?

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

- **filename:** It contains the filename to be read, or the whole path if the file is saved elsewhere.
- **encoding:** It stores the file's encoding. 'utf8' is the default setting.
- **callback function:** This is a function that is invoked after the file has been read. It requires two inputs:
 - **err:** If there was an error.
 - **data:** The file's content.
- **Return Value:** It returns the contents contained in the file, as well as any errors that may have occurred.

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

- **file_name:** It's a string, a buffer, a URL, or a file description integer that specifies the location of the file to be written. When you use a file descriptor, it will function similarly to the `fs.write()` method.
- **data:** The data that will be sent to the file is a string, Buffer, TypedArray, or DataView.
- **options:** It's a string or object that may be used to indicate optional output options. It includes three more parameters that may be selected.
- **encoding:** It's a string value that indicates the file's encoding. 'utf8' is the default setting.
- **mode:** The file mode is specified by an integer number called mode. 0o666 is the default value.
- **flag:** This is a string that indicates the file-writing flag. 'w' is the default value.
- **callback:** This function gets invoked when the method is run.
- **err:** If the process fails, this is the error that will be thrown.

(11) What are all the looping structures in Javascript?

- for/in
- for/of

- for
 for(initialization; condition; increment/decrement){
 statements;}
- while
 while(condition){
 statements;
 }
- do/while
 do{
 statements;
 }while(condition);

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

- To convert a string to integer parseInt(), Number() & Unary operator(+) function returns Nan(not number)when string doesn't contain number.

(13)What is the function of the delete operator?

- Delete operator is employed to delete a property of an object.

(14)What are all the types of Popup boxes available in javascript?

- Javascript has three types of popup boxes.
 - (1)Alert box
 - (2)Confirm box
 - (3)Prompt box

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

- Void(0) returns undefined.

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

- We can use window.location object to force a page to load another page.

(17)What are the disadvantages of using innerHTML in Javascript?

- InnerHTML is slow.