

Web Designing Assignment

Module (javascript) – 7

1. What is JavaScript?

Ans.

- **JavaScript is a high-level, dynamic programming language primarily used for creating interactive elements in web browsers.**
- **It is client-side, meaning it executes in the user's browser rather than on a server.**

2. What is the use of isNaN function?

Ans.

- **The isNaN() function checks whether a value is NaN (Not-a-Number). It returns true if the value is NaN, and false otherwise.**

3. What is negative Infinity?

Ans.

- **Negative Infinity in JavaScript is a special value that represents a number that is less than any other number.**
- **It can be obtained by dividing a negative number by zero.**

4. Which company developed JavaScript?

Ans.

- **JavaScript was originally developed by Netscape Communications Corporation, created by Brendan Eich in 1995.**

5. What are undeclared and undefined variables?

Ans.

- **Undeclared Variables:** These are variables that are not declared using var, let, or const before being assigned a value. This causes a ReferenceError in strict mode.
- **Undefined Variables:** These are variables that have been declared but have not been assigned a value. They hold the special value undefined until they are initialized.

6. Write the code for adding new elements dynamically.

Ans.

- **You can dynamically create elements in the DOM using JavaScript's document.createElement() and appendChild() methods.**
- **Example:**

```
let newDiv = document.createElement("div");  
newDiv.innerHTML = "Hello, World!";  
document.body.appendChild(newDiv);
```

7. What is the difference between ViewState and SessionState?

Ans.

- **ViewState:** Used to preserve page and control values between postbacks. It stores data on the client side in an encoded form within the page.
- **SessionState:** Used to store user-specific data on the server across multiple page requests. It is used to maintain user session information like login details.

8. What is === operator?

Ans.

- The === operator is the strict equality operator. It checks for both value and type equality. If the values and the types do not match, it returns false.
- **Example:**
`console.log(5 === '5'); // false (type mismatch)`
`console.log(5 === 5); // true`

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

Ans.

- You can change the style or class of an element using JavaScript by modifying its `className`, `classList`, or `style` properties.
- **Example:**
`document.getElementById("myElement").className = "newClass"; // change class`
`document.getElementById("myElement").style.color = "blue"; // change style`

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

Ans.

- In Node.js, you can use the fs module to read/write files.
- Example:

```
const fs = require('fs');  
fs.writeFileSync('example.txt', 'Hello World!'); // writing to  
file  
let data = fs.readFileSync('example.txt', 'utf8'); // reading  
from file  
console.log(data);
```

11. What are all the looping structures in JavaScript?

Ans.

- JavaScript supports the following looping structures:
 - for
 - while
 - do...while

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

Ans.

- Use the parseInt() function with a specified base (radix) argument.
- Example:

```
let binaryString = "1010";  
let decimalNumber = parseInt(binaryString, 2); // converts  
binary to decimal  
console.log(decimalNumber); // 10
```

13. What is the function of the delete operator?

Ans.

- The delete operator is used to remove a property from an object or an element from an array.
- Example:

```
let obj = { name: "John", age: 30 };  
delete obj.age;  
console.log(obj); // { name: "John" }
```

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

Ans.

- JavaScript has three types of pop-up boxes:
 - **alert():** Displays a message to the user.
 - **confirm():** Asks the user to confirm an action (OK/Cancel).
 - **prompt():** Allows the user to input text.

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

Ans.

- **void(0)** is used to prevent the default action of an anchor tag (**<a>**). It effectively does nothing. This is used to avoid reloading the page when a link is clicked.

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

Ans.

- You can redirect to another page using **window.location** or **window.location.href**.
- Example:

```
window.location.href = "https://www.abc.com";
```

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

Ans.

- **Security risk:** It can expose your application to Cross-Site Scripting (XSS) attacks.
- **Performance:** Using innerHTML replaces the entire content of the element, which can be inefficient.
- **Readability:** Overwrites existing content if not used carefully.