

Q.1 What is JavaScript?

Ans:- JavaScript is a scripting language used to create dynamic and interactive content on websites. It allows developers to implement complex features, such as dynamically updating content, controlling multimedia, animating images, and handling user interactions like form submissions and button clicks.

Q.2 What is the use of isNaN function?

Ans:- The isNaN() function in JavaScript is used to determine whether a given value is NaN (Not-a-Number) or not. It checks if the value provided cannot be converted to a number.

Q.3 What is negative Infinity?

Ans:- In JavaScript, negative infinity (-Infinity) is a special value that represents something that is infinitely small, or a value lower than any other number. It is used to denote a value that has gone beyond the lower limit of what JavaScript can represent as a number.

Q.4 Which company developed JavaScript?

Ans:- JavaScript was developed by Netscape Communications Corporation in 1995. The language was created by Brendan Eich, a programmer at Netscape, and it was originally called Mocha, then renamed to LiveScript, and finally to JavaScript to ride on the popularity of Java, another programming language, at the time.

Q.5 What are undeclared and undefined variables?

Ans:-undeclared variable:- is a variable that has not been defined or declared anywhere in your code using keywords like var, let, or const before being used. Accessing an undeclared variable will cause a ReferenceError in JavaScript.

undefined variables :-In JavaScript, undeclared and undefined variables refer to different concepts, though they can often cause confusion. Here's a breakdown of each.

Q.6 Write the code for adding new elements dynamically?

Ans:- <!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Dynamic Element Addition</title>

<style>

#container {

margin-top: 20px;

border: 1px solid #ccc;

padding: 10px;

```

    }
    .new-element {
        background-color: #f0f0f0;
        padding: 10px;
        margin: 5px 0;
    }
</style>
</head>
<body>
    <h1>Dynamic Element Addition Example</h1>
    <button id="addButton">Add New Element</button>
    <div id="container"></div>
    <script>
        document.getElementById('addButton').addEventListener('click', function() {
            // Create a new div element
            const newDiv = document.createElement('div');
            newDiv.className = 'new-element'; // Add a class to the new element
            newDiv.textContent = 'This is a new element!'; // Set the text content
            // Append the new div to the container
            document.getElementById('container').appendChild(newDiv);
        });
    </script>
</body>
</html>

```

Q.7 What is the difference between ViewState and SessionState?

ANS:-

ViewState SessionState

Maintains state for a single page across postbacks.

Limited to the current page.

Stored in a hidden field in the page (client-side).

Lasts as long as the page is in memory.

Increases the size of the page (included in HTML).

Used for preserving control states and UI elements.

SessionState

Stores user-specific data across multiple pages in a session.

Accessible across all pages in a session.

Stored on the server (in-memory or database).

Lasts until the session times out or is abandoned.

Q.8 What is === operator?

ANS:- The === operator in JavaScript is known as the strict equality operator. It is used to compare two values for equality, but unlike the == operator (the loose equality operator), === does not perform type coercion. This means that both the value and the type of the operands must be the same for the comparison to return true.

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

ANS:- **Changing Styles**

Inline Styles:

- Every HTML element can have inline styles, which are defined directly within the element's style attribute.
- Using JavaScript, you can access the style property of an element and modify its CSS properties.
- For instance, you can change properties like background-color, width, height, margin, and more.
- This change affects only the specific element you are targeting.

Changing Classes

CSS Classes:

- HTML elements can also have classes assigned to them, which can be defined in a separate CSS file or within a <style> tag in the HTML.
- Each class can contain multiple CSS rules that define the appearance of any element with that class.
- By using JavaScript, you can manage these classes dynamically using the classList property of an element.

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

ANS:- **Reading a File**

You can use the `<input type="file">` element to allow users to select files, and then use a `FileReader` object to read the file.

Writing a File

You can create a file using the `Blob` object and prompt the user to download it.

Q.11 What are all the looping structures in JavaScript?

Ans:- for Loop

Purpose: Used when you know how many times you want to iterate.

```
for (initialization; condition; increment/decrement) {
```

```
    // Code to execute
```

```
}
```

while Loop

Purpose: Used when the number of iterations is not known beforehand and depends on a condition.

```
while (condition) {
```

```
    // Code to execute
```

```
}
```

do...while Loop

Purpose: Similar to the while loop but guarantees that the code block is executed at least once.

```
do {
```

```
    // Code to execute
```

```
} while (condition);
```

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

Ans:- In JavaScript, you can convert a string representation of a number in any base (from base 2 to base 36) to an integer using the built-in `parseInt()` function. This function takes two arguments: the string to be converted and the base (radix) of the number in that string.

Q.13 What is the function of the delete operator?

ANS:- The delete operator in JavaScript is used to remove properties from objects or elements from arrays. Its primary function is to free up memory by removing references to those properties or elements.

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

Ans:- JavaScript provides three main types of popup boxes that can be used to interact with users: `alert`, `confirm`, and `prompt`. Each type serves a different purpose and can be used in various situations to gather user input or display information.

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

Ans:- In JavaScript, void(0) is an expression that evaluates to undefined. The void operator is used to evaluate an expression and return undefined, regardless of what the expression itself evaluates to.

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

ANS:-1 Using window.location.href

2 Using window.location.assign()

3 Using window.location.replace()

4 Using window.open()

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

ANS:- While innerHTML can be a quick way to manipulate the DOM, it carries risks and performance issues that make it less suitable for many use cases. Always consider the potential drawbacks and explore safer and more efficient alternatives for dynamic content manipulation.