Basic Java Assignment

* **What is JavaScript?**
* JavaScript is a high-level, interpreted programming language primarily used for adding interactivity and dynamic behavior to web pages. It is widely used for both client-side and server-side development.
* **What is the use of isNaN function?**
* The **isNaN()** function is used to determine whether a value is NaN (Not-a-Number) or not. It returns true if the value is NaN, and false otherwise. It's commonly used to validate whether a user input is a valid number.
* **What is negative Infinity?**
* Negative Infinity is a special value in JavaScript that represents the negative infinity value, which is smaller than any other number. It's typically the result of mathematical operations that lead to values beyond the representable range.
* **Which company developed JavaScript?**
* JavaScript was developed by Netscape Communications Corporation, specifically Brendan Eich, in 1995.
* **What are undeclared and undefined variables?**
* Undeclared variables are those that have been referenced in the code without being declared using the **var**, **let**, or **const** keywords. Undefined variables are those that have been declared but not assigned a value, or they are declared but are not accessible in the current scope.
* **Write the code for adding new elements dynamically?**
* // Example: Adding a new paragraph dynamically to a div with id "container"
* var container = document.getElementById("container");
* var newParagraph = document.createElement("p");
* var textNode = document.createTextNode("This is a new paragraph.");
* newParagraph.appendChild(textNode);
* container.appendChild(newParagraph);

**What is the difference between ViewState and SessionState?**

* ViewState is used to store state information that needs to be persisted across postbacks within the same page. SessionState, on the other hand, is used to store state information that needs to be persisted across multiple pages and sessions for a user.
* **What is === operator?**
* The **===** operator is the strict equality operator in JavaScript. It compares two values for equality without performing type coercion. It returns true if the values are equal in value and type, otherwise, it returns false.
* **How can the style/class of an element be changed?**
* You can change the style of an element using JavaScript by accessing its **style** property or by adding or removing CSS classes using the **classList** property.
* **How to read and write a file using JavaScript?**
* In a browser environment, JavaScript doesn't have direct access to the file system for security reasons. However, you can read files using the FileReader API for files selected by the user through **<input type="file">**. Writing files is typically done using server-side JavaScript in environments like Node.js, where you have access to file system APIs.
* **What are all the looping structures in JavaScript?**
* JavaScript has several looping structures:

1. **for** loop
2. **while** loop
3. **do...while** loop
4. **for...in** loop (used for iterating over object properties)
5. **for...of** loop (used for iterating over iterable objects like arrays)

* **How can you convert the string of any base to an integer in JavaScript?**
* You can use the **parseInt()** function to convert a string representation of a number in a specified base to an integer.
* **What is the function of the delete operator?**
* The **delete** operator is used to delete a property from an object or an element from an array. It does not affect the properties of an object's prototype chain.
* **What are all the types of Pop up boxes available in JavaScript?**
* JavaScript provides three types of popup boxes:

1. **alert()** - Used to display a message in a dialog box.
2. **confirm()** - Used to display a dialog box with a confirmation message and buttons for OK and Cancel.
3. **prompt()** - Used to display a dialog box with a message prompting the user to input text.

* **What is the use of Void (0)?**
* **void(0)** is often used in JavaScript to return undefined or to prevent the browser from taking any action when a link is clicked. It's commonly used as the href attribute of a link to prevent the page from navigating to a new URL.
* **How can a page be forced to load another page in JavaScript?**
* You can use the **window.location** object to load another page in JavaScript. You can either set the **window.location.href** property to the URL of the new page or use methods like **window.location.replace()** to navigate to a new page.
* **What are the disadvantages of using innerHTML in JavaScript?**
* Using **innerHTML** to modify HTML content can be less efficient and pose security risks like XSS (Cross-Site Scripting) vulnerabilities if the content is not properly sanitized. Additionally, setting **innerHTML** removes all event listeners and associated JavaScript functionality from the existing elements within the target element.