  
**JAVASCRIPT LOGICAL QUESTIONS**

**BATCH-OFSD23B (SET-1)**

1. Write a JavaScript function to check whether a string is blank or not.  
*Test Data* :  
console.log(is\_Blank(''));  
console.log(is\_Blank('abc'));  
true  
false

2. Create a dynamic list where users can add and remove items.

**Test Case:**

<input type="text" id="itemInput" placeholder="Enter item">

<button onclick="addItem()">Add Item</button>

<ul id="itemList"></ul>

3. Write a JavaScript function that returns a string that has letters in alphabetical order.  
Example string: 'webmaster'  
Expected Output : 'abeemrstw'  
Assume punctuation and numbers symbols are not included in the passed string.

4. Create a form with name and email fields. Display an error message if the name is empty or the email format is invalid when a "Submit" button is clicked.

**Test Case:**

<input type="text" id="name" placeholder="Enter your name">

<input type="email" id="email" placeholder="Enter your email">

<button onclick="validateForm()">Submit</button>

<p id="error"></p>

5. Write a program that takes an arbitrary number of strings and concatenates them using a rest parameter.

Sample Input: const result = concatenateStrings("Hello", "world", "from", "JavaScript!");

Sample Output: Concatenated String: "Hello world from JavaScript!"

6. Write a program that takes an arbitrary number of numbers and finds the maximum value using a rest parameter.

Sample Input: const max = (10, 5, 30, 15, 25);

Sample Output: Maximum Value: 30

7. Write a program that creates a deep clone of a nested array using the spread syntax.

Sample Input: const original = [1, [2, 3], [4, [5, 6]]];

Sample Output: Deep Clone: [1, [2, 3], [4, [5, 6]]]

8. Write a program that takes a function and an array of numbers, and spreads the array as function parameters.

Sample Input: const numbers = [10, 20, 30];

Sample Output: Sum: 60

9. Write a program that converts a given time from one time zone to another.

Sample Input: const time = "12:00 PM";

const fromTimeZone = "UTC";

const toTimeZone = "PST";

Sample Output: Converted Time: "4:00 AM"

10. A simple sorting algorithm that works by repeatedly stepping through the list to be sorted,

Sample Data: [6,4,0, 3,-2,1]

Expected Output : [-2, 0, 1, 3, 4, 6]

**SET-2**

11. Write a JavaScript program to find all the unique values in a set of numbers.

Test Data :

[1, 2, 2, 3, 4, 4, 5]

[1, 2, 3, 4, 5]

[1, -2, -2, 3, 4, -5, -6, -5]

Expected Output:

[1,2,3,4,5]

[1,2,3,4,5]

[1,-2,3,4,-5,-6]

12. Write a JavaScript program to check if a given number is positive, negative, or zero.

Sample output:

console.log(checkNumber(5)); // Output: Positive

console.log(checkNumber(-2)); // Output: Negative

console.log(checkNumber(0)); // Output: Zero

13. Write a JavaScript program to find the sum of all the numbers in an array.

Sample output:

console.log(findSum([1, 2, 3, 4, 5])); // Output: 15

14. Write a program that converts a time in 12-hour format to 24-hour format.

Sample Input: const time12Hour = "03:45 PM";

Sample Output: Time in 24-Hour Format: "15:45"

15. Create a "Scroll to Top" button that appears when the user scrolls down and takes them to the top of the page when clicked.

**Test Case:**

<button onclick="scrollToTop()">Scroll to Top</button>

16. Write a JavaScript conditional statement to sort three numbers. Display an alert box to show the results.  
Sample numbers : 0, -1, 4  
Output : 4, 0, -1

17. Write a JavaScript program to reverse a string without using the built-in reverse() method.

Sample output:

console.log(reverseString('Hello')); // Output: olleH

18. Write a program that takes an object, creates a copy of it, and extends it with new properties using the spread syntax.

Sample Input:

const original = { name: "John", age: 30 };

const extended = { ...original, city: "New York", profession: "Engineer" };

Sample Output: Extended Object: { name: "John", age: 30, city: "New York", profession: "Engineer" }

19. Write a program that validates user input and provides feedback or defaults.**.**

Sample Input:

const userInput = " ";

Sample Output:

Processed Input: "No valid input provided."

20. Write a JavaScript conditional statement to find the sign of the product of three numbers. Display an alert box with the specified sign.  
Sample numbers : 3, -7, 2  
Output : The sign is -