1. Write a JavaScript function to calculate the sum of two numbers.
2. Write a JavaScript program to find the maximum number in an array.

3. Write a JavaScript function to check if a given string is a palindrome (reads the same forwards and backwards).

**4. Write a JavaScript program to reverse a given string.**

**5. Write a JavaScript function that takes an array of numbers and returns a new array with only the even numbers.**

6. Write a JavaScript program to calculate the factorial of a given number.

**7. Write a JavaScript function to check if a given number is prime.**

**8. Write a JavaScript program to find the largest element in a nested array.**

**9. Write a JavaScript function that returns the Fibonacci sequence up to a given number of terms.**

**10. Write a JavaScript program to convert a string to title case (capitalize the first letter of each word).**

**11. Write a function that takes an array of objects and a key, and returns a new array sorted based on the values of that key in ascending order.**

**12. Implement a deep clone function in JavaScript that creates a copy of a nested object or array without any reference to the original.**

**13. Write a recursive function to calculate the factorial of a given number.**

**14.** Implement a function that takes two sorted arrays and merges them into a single sorted array without using any built-in sorting functions.

15. **Write a function that checks if a given string is a palindrome, considering only alphanumeric characters and ignoring case.**

16. **Create a JavaScript class for a linked list with methods to insert a node at the beginning, end, or at a specific position, and to delete a node from a given position.**

17. **Implement a function that flattens a nested array in JavaScript, converting it into a single-level array.**

18. **Write a function that determines if two strings are anagrams of each other    
19. Create a JavaScript function that returns the Fibonacci sequence up to a given number, utilizing memoization for optimized performance.**

20. Write a function to check if a given string is a palindrome.

21. Implement a function to reverse a string without using the built-in reverse() method.

22. Given an array of numbers, write a function to find the largest and smallest numbers in the array.

23. Write a function that takes an array of integers as input and returns a new array with only the unique elements.

24. Write a function that determines if a given number is prime or not.

25. Implement a function to find the sum of all the numbers in an array.

26. **Given a string, write a function to count the occurrences of each character in the string.**

27. Implement a function to remove duplicates from an array.

28. Write a function that sorts an array of numbers in ascending order.

29. Write a function that reverses the order of words in a sentence without using the built-in reverse() method.

30. **Implement a function that checks if a given string is a palindrome (reads the same forwards and backwards) while ignoring whitespace and punctuation.**

31. **Write a function that takes an array of integers and returns the largest difference between any two numbers in the array.**

32. Implement a function that removes duplicates from an array, keeping only the unique elements.

33. **Write a function that accepts a number and returns its factorial (e.g., factorial of 5 is 5 x 4 x 3 x 2 x 1).**

**34. Implement a function that flattens a nested array into a single-dimensional array.**

**35. Write a function that checks if a given string is an anagram of another string (contains the same characters in a different order).**

**36.**  Implement a function that finds the second smallest element in an array of integers.

**37. Write a function that generates a random alphanumeric string of a given length.**

**38.** ***Implement a function that converts a number to its Roman numeral representation.***

JavaScript array coding questions

39. Write a function that returns the sum of all numbers in an array.

**40. Implement a function that finds the maximum number in an array.**

**41. Write a function that returns a new array containing only the unique elements from an input array.**

**42. Implement a function that returns the average value of numbers in an array.**

**43. Write a function that sorts an array of strings in alphabetical order.**

**44. Implement a function that finds the index of a specific element in an array. If the element is not found, the function should return -1.**

**45. Write a function that removes all false values (false, null, 0, “”, undefined, and NaN) from an array.**

**46. Implement a function that merges two arrays into a single array, alternating elements from each array.**

47. Write a function that finds the second largest number in an array.

**48. Implement a function that groups elements in an array based on a given condition. For example, grouping even and odd numbers into separate arrays.**

**49. Find Missing Number** Find the missing number in an array of consecutive numbers.

**50. Remove Duplicates** Remove duplicates from an array.

**51. Merge Arrays** Merge two sorted arrays into one sorted array.

**52. Chunk Array** Split an array into chunks of a specific size.

**53. Capitalize Letters** Capitalize the first letter of each word in a sentence.

**54. Count Vowels** Count the number of vowels in a string.

**55. Rotate Array** Rotate elements in an array to the right by a given number of positions.

**56. Compress String** Compress a string by replacing consecutive repeating characters with the number of repetitions.

**57. Title Case** Capitalize the first letter of each word in a sentence.

**58. Get Max Characters** Find the most frequently occurring character in a string.

**59. Anagram Check** Check if two strings are anagrams of each other.

**60. Caesar Cipher** Implement a Caesar cipher, both encoding and decoding.

**61. Valid Parentheses** Determine if a given string containing parentheses is balanced.

**62. Longest Word** Find the longest word in a sentence.

**63. Find Factors** Find all factors of a given number.

**64. Shuffle Array** Shuffle the elements of an array.

**65. Find Intersection** Find the common elements between two arrays.

**67. Remove Even Numbers** Remove even numbers from an array.

**68. Find Duplicates** Find duplicate elements in an array.

**69. Flatten Array** Convert a nested array into a flat array.

**70. Convert to Roman Numerals** Convert a given number to Roman numerals.

**71. First Non-Repeating Character** Find the first non-repeating character in a string.

**72. Get Unique Elements** Find unique elements in an array.

**73. Check for Substring** Check if a string contains a substring.

**74. Sort Array of Objects** Sort an array of objects based on a specific property.

**75. Validate Email** Validate if a given string is a valid email address.

**76. Count Words** Count the number of words in a sentence.

**78. Reverse Words** Reverse the order of words in a sentence.

**79. Calculate Distance** Calculate the distance between two points in a 2D plane.

**80. Find Missing Element** Find the missing element in an array containing elements from 1 to n.

**81. Remove Null or Undefined** Remove null and undefined values from an array.

**82. Generate Random Password** Generate a random password with a specified length.

**83. URL Slug** Convert a string to a URL-friendly format.

**84. Validate Palindrome Sentence** Check if a sentence is a valid palindrome considering only alphanumeric characters and ignoring spaces.

**85. Convert Binary to Decimal** Convert a binary number to its decimal equivalent.

**86. Check for Pangram** Check if a sentence contains every letter of the alphabet.

**87. Find Median of Two Sorted Arrays** Find the median of two sorted arrays.

**88. Reverse Linked List** Reverse a linked list.

**89. Implement a Stack** Implement a stack with push, pop, top, and isEmpty operations.

**90. Implement a Queue** Implement a queue with enqueue, dequeue, front, and isEmpty operations.

**91. Merge Sort** Implement the merge sort algorithm.

**92. Quick Sort** Implement the quick sort algorithm.

**93. Binary Search** Implement the binary search algorithm.

94. Explain what a callback function is and provide a simple example

95. Given a string, reverse each word in the sentence without replacing its occurrence (Ex: “Hello world” => “olleH dlrow”)

96. How to check if an object is an array or not ? Provide some code.

97. How to empty an array in javascript write code?

98. Implement enqueue and dequeue using only two stacks?

99. Write a “mul” function which will properly when invoked as below syntax   
console.log(mul(2)(3)(4)); //output : 24

console.log(mul(4)(3)(4)); //output : 48

100. Given two strings, return true if they are anagrams of another : For example Mary is an Anagram of Army