#### Master Javascript!!

50+ Javascript Questions

Let's GO

#### 1. Print "Hello World!" to the console.

### 2. Print numbers from 1 to 10 on the console using a loop.

#### 3. Write a function to add two numbers and return the result.

4. Create a function to calculate the area and perimeter of a rectangle given its width and height.

# 5. Write a function that takes a string and returns the reversed version of it.

6. Write a function that checks if a number is even or odd and returns "Even" or "Odd" accordingly.

#### 7. Create a program that checks if a given year is a leap year.

#### 8. Find the sum of all elements in an array.

9. Create an Object representing a car with properties like make, model, and year. Add a method to the car object to start the engine.

### 10. Change the text of a pragraph on a webpage using Javascript.

#### 11. Create a button dynamically and add it to the webpage.

## 12. Add a click event listener to a button that displays an alert when clicked.

### 13. Write a function that calculates the factorial of a given number.

14. Create a function that generates a random number between a given range.

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

### 16. Use `map()` to double all the elements in an array

17. Find the largest element in an array using the `reduce()` method.

#### 18. Remove all occurrences of a specific element from an array.

19. Create a Function that displays the current date and time in a specific format.

20. Implement a try catch block to handle an error that occurs during API data fetching.

# 21. Write a recursive function to calculate the factorial of a given number.

# 22. Implement a recursive function to find the nth Fibonacci Number.

23. Create a counter function using closures that increments and returns the count on each call.

#### 24. Implement a private variable using closures.

25. Create a prototype for a Product object with properties like name, price, and quantity. Add a method to the product prototype to calculate the total value

26. Implement a function that makes multiple API calls and and processes the data using callbacks.

#### 27. Rewrite the previous exercise using Promises.

28. Use promises to load multiple images asynchronously and display them on a webpage.

### 29. Rewrite the previous exercise using async/await.

30. Implement an async function to fetch data from an API and handle errors using try/catch.

# 31. Create an image gallery using dynamically generated elements.

32. Implement a form validation function that checks if all required fields are filled out.

33. Create multiple nested elements and observe the event bubbling and capturing behaviour.

34. Implement a click event on a parent element that triggers different actions based on which child element was clicked.

35. You are tasked with creating a countdown timer using javascript and the setInterval function. The countdown timer should start at 1 minute and update every second until it reaches 00:00. When the countdown reaches 0, an alert should pop up to notify that the countdown is completed.

## 36. Write the JavaScript code to implement the quote-changing feature.

## 37. Write a regular expression to validate an email address.

38. Create a Javascript function that generates a 2D array with the specified number of rows and columns. Each element in the array should contain the sum of its row index and column index. Once you've created the array, write two additional functions to display the array in its original form and in reverse.

## 39. Destructure an object to get its properties.

40. Create a class representing a BOOK with properties like title, author, and year. Add a method to the book class to get the book's age (current year - year of publication).

41. Create a subclass 'Magazine' that extends the Book class with an additional property issue. Add a method to the 'Magazine' class to get the magazine's issue number.

42. Create an object 'person' with properties like name and age. Then create a new object 'student' that inherits from 'person and has an additional property 'studentId'. Add a method to the 'person' object and demonstrate that 'student' also has access to it.

43. Create a function that determines whether a number is Oddish or Evenish. A number is Oddish if the sum of all its digits is odd and Evenish if the sum is even. If a number is oddish return "Oddish" and "Evenish" if even.

44. Given a string, reverse all the words which have odd length. The even length words are not changed.

45. Create a function that takes an array of objects (groceries) which calculates the total price and returns it as a number.

46. Create a function that takes an array of numbers and return "Boom!" if the digit 7 appears in the array. Otherwise, return "there is no 7 in the array".

47. Create a function that takes a string as an arguement. The function must return a string containing 1s and 0s based on the string arguement's words. if any word in the arguement is not equal to "zero" or "one" (case insensitive), you should ignore it. The returned string's length should be a multiple of 8, if the string is not a multiple of 8, you should remove the numbers in excess

48. Create a function that takes in a sentence and returns a running list of consonants per word and vowel per word.

49. Create a function that takes the month and year as integers and returns the number of days in that month.

50. Given two integers representing the numerator and denominator of a fraction, return the fraction in string format.