JavaScript Questions

1. Basic Console Usage (10 Questions)

1. Log your name and favorite hobby to the console.
2. Perform and log the result of `45 * 2 - 10`.
3. Use `console.log()` to display the current year.
4. Create two variables for first and last name. Concatenate and log them.
5. Track the value of a variable by logging it before and after updating.
6. Use `console.error()` to simulate an error message.
7. Log the square of the number 12 to the console.
8. Print the type of a variable holding the value `true`.
9. Create a variable holding your age and log whether it's greater than 18.
10. Log the result of `100 / 0` and observe the output.

2. Variables and Data Types (10 Questions)

11. Declare a variable using `let` and log its value.
12. Create a constant to store the value of PI and log it.
13. Reassign a value to a variable declared with `let` and log the result.
14. Check the type of `null` and log it.
15. Create a variable with a number as a string (e.g., "25") and log its type.
16. Use `typeof` to check the type of a boolean variable.
17. Create three variables of types string, number, and boolean, and log their values.
18. Declare a variable without assigning a value. Log its type.
19. Create a variable with `undefined` and log its type.
20. Use `const` to create an array. Try reassigning the array and observe the error.

3. Loops (10 Questions)

21. Write a `for` loop to print numbers from 1 to 50.
22. Use a `while` loop to sum the numbers from 1 to 10.
23. Create a `for...of` loop to log each character of the string "JavaScript".
24. Write a `for` loop that logs numbers between 1 and 10.
25. Use a `do...while` loop to log numbers from 5 to 1.
26. Create a `for` loop that calculates the factorial of 5.
27. Write a nested loop to print a 3x3 grid of numbers.
28. Use a `for` loop to reverse an array `[1, 2, 3, 4]`.
29. Write a `while` loop that logs numbers from 1 to 100 divisible by 5.
30. Use a `for...in` loop to iterate over an object and log its keys.

4. Arrays (10 Questions)

31. Create an array of your top 5 favorite movies and log it.
32. Find and log the second element of an array.
33. Add two new elements to the start of an array using `.unshift()`.

34. Remove the last element of an array and log the updated array.
35. Use `.slice()` to extract the first three elements of an array.
36. Find the index of a specific element in an array using `.indexOf()`.
37. Check if a value exists in an array using `.includes()`.
38. Combine two arrays `[1, 2]` and `[3, 4]` using `.concat()`.
39. Sort an array `[5, 2, 9, 1]` in ascending order.
40. Write a program that creates a copy of an array without mutating the original.

5. Functions (10 Questions)

41. Write a function to check if a number is even or odd.
42. Create a function to calculate the area of a circle with a given radius.
43. Write a function that accepts an array and returns the sum of its elements.
44. Create a function that checks if a string starts with a specific character.
45. Write a function to find the maximum of two numbers.
46. Create a function that takes a number and returns its factorial.
47. Write a function that accepts a string and returns its reverse.
48. Create a function to find the largest number in an array.
49. Write a function that converts a string to kebab-case (e.g., "Hello World" -> "hello-world").
50. Create a function that logs "Hello, World!" every time it is called.

6. Conditionals (10 Questions)

51. Write a program to check if a number is positive, negative, or zero.
52. Create a program to check if a year is a leap year.
53. Write an `if...else` statement to check if a person can vote based on their age.
54. Use a switch statement to print the name of the day based on its number (1 = Monday, etc.).
55. Write a program to check if a string is a palindrome.
56. Create a program that assigns a grade based on a test score.
57. Write a program that determines if a number is prime.
58. Create a function that returns "fizz" if a number is divisible by 3, "buzz" if divisible by 5, and "fizzbuzz" if divisible by both.
59. Write a program that finds the largest of three numbers.
60. Create a function that checks if a number is within a given range.