

Assignment 1

1. Write a JavaScript function to calculate the sum of two numbers.
2. Write a JavaScript function to check if a given string is a palindrome.
3. Write a JavaScript program to reverse a given string.
4. Write a JavaScript function that takes an array of numbers and returns a new array with only the even numbers.
5. Implement a deep clone function in JavaScript that creates a copy of a nested object or array without any reference to the original.
6. Implement a function to reverse a string without using the built-in reverse () method.
7. Implement a function to find the sum of all the numbers in an array.
8. Write a function that accepts a number and returns its factorial (e.g., factorial of 5 is $5 \times 4 \times 3 \times 2 \times 1$).
9. Implement a function that returns the average value of numbers in an array.
10. 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.
11. How would you check if a number is an integer?
12. Create a function that takes the age in years and returns the age in days.
13. Explain what a callback function is and provide a simple example.