In Class Exercises

1. Write a JavaScript program that displays "Hello, World!" in the browser console.
2. Create a JavaScript function that takes two numbers as input, performs addition, subtraction, multiplication, and division operations on them, and displays the results in the browser console.
3. Write a JavaScript program that prints the numbers 1 to 10 using a `for` loop and another version using a `while` loop.
4. Write a JavaScript program that checks if a given number is even or odd and displays the result in the browser console.
5. Create an array of 5 names. Use a `for` loop to iterate through the array and print each name in the browser console.
6. Write a function that takes a string as input and returns the string reversed.
7. Create a function that checks whether a given word or phrase is a palindrome. A palindrome is a word or phrase that reads the same backwards as forwards.
8. Write a program that prints the numbers from 1 to 100. For multiples of 3, print "Fizz" instead of the number, and for the multiples of 5, print "Buzz." For numbers which are multiples of both 3 and 5, print "FizzBuzz."
9. Write a function that takes a string as input and returns the length of the longest word in the string.
10. Write a function that takes a string as input and returns the number of vowels (a, e, i, o, u) in the string.
11. Create a function that takes a positive integer as input and returns its factorial. The factorial of a non-negative integer `n` is the product of all positive integers less than or equal to `n`.
12. Write a function that generates the first `n` numbers in the Fibonacci sequence. The Fibonacci sequence is a series of numbers in which each number is the sum of the two preceding ones, usually starting with 0 and 1.
13. Write a function that finds the sum of all multiples of 3 or 5 below a given number.
14. Create a function that checks if a given number is a prime number. A prime number is a number greater than 1 that is only divisible by 1 and itself.
15. Create a function that takes a string and a number as input, and returns the Caesar cipher of the string, shifted by the given number. The Caesar cipher is a simple encryption technique where each letter in the plaintext is replaced by a letter some fixed number of positions down the alphabet.