script.js

```
 1  /*
 2
 3  9. What distinguishes a recursive function in JavaScript? Write a program to solve the Fibonacci series of a given n number.
 4
 5  Ans: A recursive function in JavaScript is a function that calls itself during its execution. This technique is used to solve
    problems that can be broken down into smaller, similar problems. Recursion continues until a base case is met, preventing
    infinite recursion.
 6
 7  */
 8
 9  console.clear();
10
11  function fibonacciSeries(n) {
12
13      // Check if n is a positive integer
14
15      if (n <= 0) {
16
17          return [];
18      }
19
20      // Check if n is 1
21
22      if (n === 1) {
23
24          return [0];
25      }
26
27      // Check if n is 2
28
29      if (n === 2) {
30
31          return [0, 1];
32      }
33
34      // Initialize the series
```

```
35
36        let series = [0, 1];
37
38        // Generate the rest of the series
39
40        for (let i = 2; i < n; i++) {
41
42            series.push(series[i - 1] + series[i - 2]);
43        }
44
45        return series;
46  }
47
48  // Example usage:
49
50  const n = 10; // Change this to any number you want
51
52  console.log(`Fibonacci series up to ${n}:`, fibonacciSeries(n));
```