Let's explore code examples for each of the advanced JavaScript topics you mentioned: Decorators, Generators, and Iterators.

1. Decorators

Decorators are functions that modify the behavior of classes, methods, or properties. In JavaScript, decorators are usually represented by functions that take a class, method, or property as an argument and return a modified version of it. Decorators are currently in stage 2 of the TC39 proposal process.

Here's an example of using a decorator to log the execution of a method:

```javascript
// Define a decorator function
function logExecution(target, key, descriptor) {
    const originalMethod = descriptor.value;

    descriptor.value = function (...args) {
        console.log(`Executing ${key} with arguments:`, args);
        const result = originalMethod.apply(this, args);
        console.log(`Result of ${key}:`, result);
        return result;
    };

    return descriptor;
}

// Define a class with a method decorated with the logExecution decorator
class Calculator {
    @logExecution
    add(a, b) {
        return a + b;
    }
}

// Create an instance of the Calculator class
const calculator = new Calculator();

// Call the decorated method
calculator.add(2, 3);
```

In this example, the `logExecution` decorator wraps the `add` method of the `Calculator` class, logging the method's arguments and result each time it is called.

2. Generators

Generators are functions that can be paused and resumed, yielding values on each iteration. They use the `function*` syntax and the `yield` keyword.

Here's an example of a generator that produces a sequence of numbers:

```javascript
// Define a generator function
function* numberGenerator() {
    let num = 1;
    while (true) {
        yield num;
        num += 1;
    }
}

// Create a generator instance
const generator = numberGenerator();

// Retrieve values from the generator
console.log(generator.next().value); // Output: 1
console.log(generator.next().value); // Output: 2
console.log(generator.next().value); // Output: 3
```

In this example, the `numberGenerator` function is a generator that yields an infinite sequence of numbers starting from 1. Each call to `generator.next()` retrieves the next value in the sequence.

3. Iterators

Iterators are objects that define a protocol for iterating over a collection of items. An object is iterable if it implements the `Symbol.iterator` method and returns an iterator object.

Here's an example of creating a custom iterable object:

```javascript
// Define a custom iterable object
const fibonacci = {
    [Symbol.iterator]() {
        let prev = 0;
        let curr = 1;
```

```
        let index = 0;

        return {
            next() {
                const result = {
                    value: prev,
                    done: false
                };
                [prev, curr] = [curr, prev + curr];
                index++;
                return result;
            }
        };
    }
};

// Use a for...of loop to iterate over the fibonacci iterable object
for (const number of fibonacci) {
    console.log(number);
    // Stop the loop after printing 10 numbers
    if (number > 34) {
        break;
    }
}
```

In this example, we define a custom iterable object named `fibonacci` that generates a Fibonacci sequence. The `[Symbol.iterator]()` method returns an iterator object that defines how to iterate over the sequence. The `for...of` loop is used to iterate over the `fibonacci` iterable and print the numbers until a certain condition is met.
Certainly! Let's explore code examples for each of the advanced JavaScript topics you mentioned: Decorators, Generators, and Iterators.

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In this example, the `logExecution` decorator wraps the `add` method of the `Calculator` class, logging the method's arguments and result each time it is called.

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In this example, the `numberGenerator` function is a generator that yields an infinite sequence of numbers starting from 1. Each call to `generator.next()` retrieves the next value in the sequence.

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In this example, we define a custom iterable object named `fibonacci` that generates a Fibonacci sequence. The `[Symbol.iterator]()` method returns an iterator object that defines how to iterate over the sequence. The `for...of` loop is used to iterate over the `fibonacci` iterable and print the numbers until a certain condition is met.