Question 1: Explain the setTimeout() and setInterval() functions in JavaScript. How are they used for timing events?

**🔹 1. setTimeout()**

**Purpose**:  
Runs a function **once after a specified delay**.

**Syntax**:

setTimeout(function, delay);

* function: The code to execute (callback).
* delay: Time in milliseconds (1 second = 1000 ms).

**Example**:

*setTimeout(function () {*

*console.log("This message appears after 2 seconds");*

*}, 2000);*

**🔹 2. setInterval()**

**Purpose**:  
Runs a function **repeatedly at specified intervals** until stopped.

**Syntax**:

setInterval(function, interval);

* interval: Time in milliseconds between each execution.

**Example**:

*setInterval(function () {*

*console.log("This message repeats every 3 seconds");*

*}, 3000);*

Question 2: Provide an example of how to use setTimeout() to delay an action by 2 seconds.

**✅ Example: Delayed Message**

*<!DOCTYPE html>*

*<html>*

*<head>*

*<title>setTimeout Example</title>*

*</head>*

*<body>*

*<h2>Wait for 2 seconds...</h2>*

*<script>*

*// Delay action by 2 seconds*

*setTimeout(function() {*

*alert("This alert appears after 2 seconds!");*

*}, 2000);*

*</script>*

*</body>*

*</html>*