## **ANSWER 3-**

In JavaScript, 'setTimeout' and 'setInterval' are functions used for scheduling and executing code at specific time intervals. Here's an explanation of each:

<u>'setTimeout'</u>: The 'setTimeout' function allows you to execute a specified piece of code (a callback function) after a specified delay (in milliseconds). It takes two parameters: the callback function to execute and the delay duration. After the specified delay, the callback function is invoked once. For example:

```
setTimeout(function() {
  // Code to execute after the delay }, 2000);
// Executes the function after a 2000ms (2-second) delay
```

In this example, the provided callback function will be executed once after a delay of 2000 milliseconds (or 2 seconds).

'setInterval': The 'setInterval' function is similar to 'setTimeout', but it repeatedly executes a callback function at a specified interval until it is explicitly stopped. It also takes two parameters: the callback function and the interval duration. The callback function is executed repeatedly at the specified interval. For example: setInterval(function() {

```
// Code to execute at each interval }, 1000);
```

// Executes the function repeatedly every 1000ms (1 second)

In this example, the callback function will be executed every 1000 milliseconds (or 1 second) indefinitely until clearInterval is called to stop it.

Both 'setTimeout' and 'setInterval' are commonly used for various purposes in JavaScript applications.

They provide a way to delay the execution of code or to create repetitive tasks. It's important to note that both functions return an identifier (a numeric value) that can be used with clearTimeout or clearInterval to cancel or stop the execution of the respective timers.