**LAB EXERCISES**

**EX.NO:06**

**JAVASCRIPT OBJECTS AND FUNCTIONS**

**AIM:**

**To write a JavaScript program to create a clock in 24 hours format using Data Object. (Do not include AM/PM)**

**PROCEDURE:**

1. ***Create a basic HTML structure with <html>, <head>, and <body> tags.***
2. ***Inside the <body>, add an element (e.g., <div>) with an id to display the clock.***
3. ***Use the <script> tag to write JavaScript.***
4. ***Define a function (e.g., show Time()) to.***
5. ***Create a new Date object.***
6. ***Extract hours, minutes, and seconds using get Hours(), get Minutes(), and get Seconds().***
7. ***Add leading zeroes if any value is less than 10.***
8. ***Format the time in HH:MM:SS (24-hour format).***
9. ***Update the content of the clock display element.***
10. ***Use set Interval() to call the function every 1000 milliseconds (1 second).***
11. ***Save the file with .html extension and open in a browser.***

**PROGRAM:**

**<!DOCTYPE html>**

**<html lang="en">**

**<head>**

**<meta charset="UTF-8">**

**<title>24-Hour Clock</title>**

**<style>**

**body {**

**font-family: Arial, sans-serif;**

**text-align: center;**

**margin-top: 50px;**

**}**

**#clock {**

**font-size: 36px;**

**}**

**</style>**

**</head>**

**<body>**

**<h1>24-Hour Clock</h1>**

**<div id="clock"></div>**

**<script>**

**function updateClock() {**

**const now = new Date();**

**let hours = now.getHours();**

**let minutes = now.getMinutes();**

**let seconds = now.getSeconds();**

**// Add leading zero if needed**

**hours = hours < 10 ? '0' + hours : hours;**

**minutes = minutes < 10 ? '0' + minutes : minutes;**

**seconds = seconds < 10 ? '0' + seconds : seconds;**

**const time = hours + ':' + minutes + ':' + seconds;**

**document.getElementById('clock').textContent = time;**

**setTimeout(updateClock, 1000);**

**}**

**updateClock();**

**</script>**

**</body>**

**</html>**

**RESULT:**

**Thus the above HTML Code is executed and the output is obtained.**