

Practical – 2

Write HTML/Javascript code to change the background color of div element periodically. For example, at every 30 seconds it changes the background color. Hint: use setInterval function. Write HTML/Javascript code to make an animation for displaying set of images. It takes frequency (in milliseconds) of image repetition as input from the user. Also, it shows button to start/stop (single button which toggles) the animation.

CODE :

```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Practical 2</title>
  <style>
    .first {
      border: 2px solid black;
      height: 50px;
    }
  </style>
</head>

<body>
  <h3>Q1. Change bgcolor after 30 sec.</h3>
  <div class="first"></div>
  <h3>Q2. Image animation with start/stop toggle button and user-defined frequency</h3>
  <label for="imgfreq">Frequency (ms):</label>
  <input type="number" id="imgfreq" placeholder="e.g. 1000" min="100"><br><br>
  <div>
    
  </div>
  <br>
  <button id="toggleBtn">Start</button>
  <span id="status" style="margin-left:10px">Stopped</span>
  <script>
    function getRanCol() {
      let random1 = Math.floor(Math.random() * 255) + 1;
      let random2 = Math.floor(Math.random() * 255) + 1;
      let random3 = Math.floor(Math.random() * 255) + 1;
```

```
    let randomColor = `rgb(${random1},${random2},${random3})`;
    return randomColor;
}
```

```
let div = document.querySelector("div");
setInterval(() => {
    div.style.backgroundColor = getRanCol();
}, 30000);
```

```
const imgs = ["img1.jpg", "img2.jpg", "img3.jpg", "img4.jpg"];
const imgElem = document.getElementById('animImg');
const freqInput = document.getElementById('imgfreq');
const toggleBtn = document.getElementById('toggleBtn');
const status = document.getElementById('status');
```

```
let intervalId = null;
let currentIndex = 0;
```

```
function startAnimation() {
    let ms = parseInt(freqInput.value, 10);
    imgElem.src = imgs[currentIndex];
    intervalId = setInterval(() => {
        currentIndex = (currentIndex + 1) % imgs.length;
        imgElem.src = imgs[currentIndex];
    }, ms);
    toggleBtn.textContent = 'Stop';
    status.textContent = 'Running';
}
```

```
function stopAnimation() {
    clearInterval(intervalId);
    intervalId = null;
    toggleBtn.textContent = 'Start';
    status.textContent = 'Stopped';
}
```

```
toggleBtn.addEventListener('click', () => {
    if (intervalId) {
        stopAnimation();
    } else {
        startAnimation();
    }
});
```

```
</script>  
</body>  
  
</html>
```

OUTPUT :

Q1. Change bgcolor after 10 sec.**Q2. Image animation with start/stop toggle button and user-defined frequency**Frequency (ms):  Running