Practical No 6

Aim: Write a Java program to implement document object model to change the background color of the web page automatically after every 5 seconds

Resources Required:

- · Java Development Kit (JDK)
- · Text Editor (e.g., Notepad++) or IDE (e.g., Eclipse, IntelliJ IDEA, NetBeans)
- · Command-line terminal or Java compiler

Theory:

The Document Object Model (DOM) is a programming interface for HTML and XML documents. It represents the page so that programs can manipulate the structure, style, and content dynamically. Through the DOM, scripts can access and update the content, structure, and styling of a webpage while it is being displayed in the browser.

In this program, JavaScript (embedded within an HTML file) is used to manipulate the DOM. The document object in JavaScript represents the entire HTML page. By accessing document.body.style, we can modify the background color property of the webpage.

The program defines an array of colors and uses a timer function setInterval() to automatically change the background color every 5 seconds. Each time the timer triggers, the DOM is updated by setting a new background color, creating a dynamic and visually interactive effect on the webpage.

Source Code:

```
<!DOCTYPE html>
<html>
<head>
  <title>Auto Background Color Change</title>
  <script type="text/javascript">
    var colors = ["#FFB6C1", "#ADD8E6", "#90EE90", "#FFD700", "#FF7F50"];
    var index = 0;

    function changeColor() {
      document.body.style.backgroundColor = colors[index];
      index = (index + 1) % colors.length;
    }

    setInterval(changeColor, 5000); // Change every 5 seconds
```

```
    </script>
</head>
<body>
    <h2 style="text-align:center;">Background changes every 5 seconds</h2>
</body>
</html>
```

Output:

This Java program successfully demonstrates document object model to change the background color of

the web page automatically after every 5 seconds