Experiment 4

# Aim

To create a live character counter for a textarea input.

# Objective

To dynamically display the number of characters typed by the user in a textarea using HTML, CSS, and JavaScript.

# Description

This experiment demonstrates how to implement a live character counter for a textarea. It uses JavaScript to detect user input and updates the character count in real-time. CSS styles enhance readability and presentation, while HTML provides the structure.

# Codes

## HTML

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Live Character Counter</title>

<link rel="stylesheet" href="style.css">

</head>

<body>

<div class="container">

<h2>Live Character Counter</h2>

<textarea id="myTextarea" placeholder="Type something..."></textarea>

<div id="charCount">0 characters</div>

</div>

<script src="script.js"></script>

</body>

</html>

## CSS

body {

font-family: Arial, sans-serif;

display: flex;

justify-content: center;

align-items: center;

height: 100vh;

background-color: #f5f5f5;

}

.container {

width: 400px;

padding: 20px;

background-color: white;

border-radius: 10px;

box-shadow: 0 4px 10px rgba(0,0,0,0.1);

}

textarea {

width: 100%;

height: 150px;

padding: 10px;

font-size: 16px;

resize: none;

border: 1px solid #ccc;

border-radius: 5px;

box-sizing: border-box;

}

#charCount {

margin-top: 10px;

text-align: right;

font-size: 14px;

color: #555;

}

## JAVASCRIPT

const textarea = document.getElementById('myTextarea');

const charCount = document.getElementById('charCount');

textarea.addEventListener('input', () => {

const count = textarea.value.length;

charCount.textContent = `${count} character${count !== 1 ? 's' : ''}`;

});

# Learning outcomes

Understand how to use the textarea element in HTML.

Learn to manipulate DOM elements with JavaScript.

Implement real-time event handling using the input event.

Apply CSS to style input fields and counters.

Gain basic skills in dynamic web interactivity.