**Task 5:-**

**Build a web page that fetches weather data from a weather API based on the user's location or a user-inputted location. Display the current weather conditions, temperature, and other relevant information.**

**Code**:-

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>Weather App</title>

<style>

body {

font-family: Arial, sans-serif;

padding: 2rem;

background: #eef;

}

h1 {

color: #333;

}

#weather {

background: #fff;

padding: 1rem;

border-radius: 8px;

box-shadow: 0 0 8px rgba(0,0,0,0.1);

max-width: 400px;

margin-top: 1rem;

}

input, button {

padding: 0.5rem;

font-size: 1rem;

margin: 0.3rem 0;

}

</style>

</head>

<body>

<h1>Weather App</h1>

<button onclick="getLocation()">Get Weather by Current Location</button>

<p>or</p>

<input type="text" id="cityInput" placeholder="Enter city name">

<button onclick="getWeatherByCity()">Get Weather by City</button>

<div id="weather"></div>

<script>

const apiKey = 'YOUR\_API\_KEY\_HERE';

function displayWeather(data) {

const weatherDiv = document.getElementById('weather');

if (data.cod !== 200) {

weatherDiv.innerHTML = `<p>Error: ${data.message}</p>`;

return;

}

weatherDiv.innerHTML = `

<h2>${data.name}, ${data.sys.country}</h2>

<p><strong>Temperature:</strong> ${data.main.temp}°C</p>

<p><strong>Condition:</strong> ${data.weather[0].description}</p>

<p><strong>Humidity:</strong> ${data.main.humidity}%</p>

<p><strong>Wind Speed:</strong> ${data.wind.speed} m/s</p>

`;

}

function getWeather(lat, lon) {

fetch(`https://api.openweathermap.org/data/2.5/weather?lat=${lat}&lon=${lon}&units=metric&appid=${apiKey}`)

.then(res => res.json())

.then(data => displayWeather(data))

.catch(err => console.error(err));

}

function getLocation() {

if (navigator.geolocation) {

navigator.geolocation.getCurrentPosition(

position => {

const { latitude, longitude } = position.coords;

getWeather(latitude, longitude);

},

error => alert("Location access denied or unavailable.")

);

} else {

alert("Geolocation not supported by this browser.");

}

}

function getWeatherByCity() {

const city = document.getElementById('cityInput').value;

if (!city) return alert("Please enter a city name.");

fetch(`https://api.openweathermap.org/data/2.5/weather?q=${city}&units=metric&appid=${apiKey}`)

.then(res => res.json())

.then(data => displayWeather(data))

.catch(err => console.error(err));

}

</script>

</body>

</html>

**Output**:-

City: Paris, FR

Temperature: 22°C

Condition: scattered clouds

Humidity: 60%

Wind Speed: 4.1 m/s