2. Build a Weather Info Viewer using Fetch API and Promises (OpenWeatherMap API); manage Git commits and pushes.

index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Simple Weather Viewer</title>
    <link
href="https://fonts.googleapis.com/css2?family=Inter:wght@400;600&display=swap
" rel="stylesheet">
    <link href="styles.css" rel="stylesheet">
</head>
<body>
    <div class="weather-container">
        <h1 class="weather-app-title">Weather App ☀</h1>
        <input type="text" id="cityInput" placeholder="Enter city name..."
class="city-input">
        <button id="getWeatherBtn" class="get-weather-button">Get
Weather</button>
        <div id="weatherInfo" class="weather-info">
            <!-- Weather information will be displayed here -->
            <p>Enter a city name and click "Get Weather" to see the current
conditions.</p>
        </div>
    </div>
    <script src="script.js"></script>
</body>
</html>
```

styles.css

```
/* General Body Styling */
        body {
            font-family: 'Inter', sans-serif;
            background-image:
url("https://static.vecteezy.com/system/resources/previews/056/635/420/non_2x/
rainy-day-wallpaper-hd-photo.jpeg");
            background-position: center;
            display: flex;
            justify-content: center;
            align-items: center;
            min-height: 100vh; /* Full viewport height */
            margin: 0;
            color: #334155; /* Dark gray text */
```

```
        }

        /* Container for the weather app */
        .weather-container {
            background-color: #ffffff; /* White background */
            padding: 2rem;
            border-radius: 1rem; /* Rounded corners */
            box-shadow: 0 10px 15px -3px rgba(0, 0, 0, 0.1), 0 4px 6px -2px
rgba(0, 0, 0, 0.05); /* Soft shadow */
            text-align: center;
            width: 90%; /* Responsive width */
            max-width: 400px; /* Max width for larger screens */
        }

        /* Heading for the app */
        .weather-app-title {
            font-size: 2rem; /* h1 size */
            font-weight: 600; /* Semi-bold */
            margin-bottom: 1.5rem; /* Space below title */
            text-align: center;
        }

        /* Input field styling */
        .city-input {
            padding: 0.75rem 1rem;
            border: 1px solid #cbd5e1; /* Light border */
            border-radius: 0.5rem; /* Rounded corners */
            width: calc(100% - 2rem); /* Full width minus padding */
            margin-bottom: 1rem; /* Space below input */
            font-size: 1rem;
            color: #475569; /* Darker gray text */
            transition: all 0.2s ease-in-out; /* Smooth transition for focus
*/
        }

        /* Button styling */
        .get-weather-button {
            background-color: #3b82f6; /* Blue background */
            color: #ffffff; /* White text */
            padding: 0.75rem 1.5rem;
            border-radius: 0.5rem; /* Rounded corners */
            border: none;
            cursor: pointer;
            font-size: 1rem;
            font-weight: 600; /* Semi-bold */
            transition: background-color 0.2s ease-in-out, transform 0.1s
ease-in-out; /* Smooth transitions */
        }
```

```
        /* Weather information display area */
        .weather-info {
            margin-top: 1.5rem;
            padding-top: 1.5rem;
            border-top: 1px solid #e2e8f0; /* Top border */
            min-height: 100px; /* Prevents layout shifting when content
changes */
            display: flex;
            flex-direction: column;
            justify-content: center;
            align-items: center;
            text-align: center;
        }

        /* City and country name in weather info */
        .weather-info h2 {
            font-size: 2rem;
            font-weight: 600;
            margin-bottom: 0.5rem;
            color: #1e293b; /* Very dark gray */
        }

        /* General text in weather info */
        .weather-info p {
            font-size: 1.1rem;
            margin-bottom: 0.4rem;
            color: #475569; /* Dark gray text */
        }

        /* Temperature specific styling */
        .weather-info .temp {
            font-size: 2.5rem;
            font-weight: 700; /* Bold */
            color: #0f172a; /* Even darker gray */
            margin-bottom: 0.5rem;
        }

        /* Error message styling */
        .error-message {
            color: #ef4444; /* Red color */
            font-weight: 500; /* Medium weight */
            margin-top: 1rem;
        }
```

script.js

```
// IMPORTANT: Replace 'YOUR_API_KEY' with your actual OpenWeatherMap API key.
        // You can get a free API key from: https://openweathermap.org/api
        const API_KEY = 'YOUR_API_KEY';
        const weatherInfoDiv = document.getElementById('weatherInfo');
        const cityInput = document.getElementById('cityInput');
        const getWeatherBtn = document.getElementById('getWeatherBtn');

        async function getWeatherData(city) {
            weatherInfoDiv.innerHTML = '<p>Loading weather data... ⏳</p>';
            const apiUrl =
`https://api.openweathermap.org/data/2.5/weather?q=${city}&appid=${API_KEY}&un
its=metric`;

            try {
                const response = await fetch(apiUrl);
                if (!response.ok) {
                throw new Error(`HTTP error! status: ${response.status} -
${response.statusText}`);
                }
                const data = await response.json();
                displayWeather(data);
            } catch (error) {
                console.error('Error fetching weather data:', error);
                let errorMessage = 'Failed to fetch weather data. Please try
again.';
                if (error.message.includes('404')) {
                    errorMessage = 'City not found. Please check the spelling
and try again.';
                } else if (error.message.includes('401')) {
                    errorMessage = 'API Key is invalid or missing. Please
ensure your API_KEY is correct.';
                }
                weatherInfoDiv.innerHTML = `<p class="error-
message">${errorMessage} 😔</p>`;
            }
        }
        function displayWeather(data) {
            const cityName = data.name;
            const country = data.sys.country;
            const temperature = data.main.temp;
            const description = data.weather[0].description;
            const humidity = data.main.humidity;
            const windSpeed = data.wind.speed
            const formattedDescription = description.charAt(0).toUpperCase() +
description.slice(1);
            weatherInfoDiv.innerHTML = `
                <h2>${cityName}, ${country}</h2>
```

```
                <p class="temp">${temperature}°C</p>
                <p>${formattedDescription}</p>
                <p>Humidity: ${humidity}%</p>
                <p>Wind Speed: ${windSpeed} m/s</p>
            `;
        }

        // Add event listener to the button
        getWeatherBtn.addEventListener('click', () => {
            const city = cityInput.value.trim(); //
            if (city) {
                getWeatherData(city);
            } else {
                weatherInfoDiv.innerHTML = '<p class="error-message">Please
enter a city name!</p>';
            }
        });

        // Optional: Allow pressing Enter key to trigger search
        cityInput.addEventListener('keypress', (event) => {
            if (event.key === 'Enter') {
                getWeatherBtn.click(); // Simulate a click on the button
            }
        });

        // Initial message on load
        window.onload = () => {
             weatherInfoDiv.innerHTML = '<p>Enter a city name and click "Get
Weather" to see the current conditions.</p>';
        };
```

OUTPUT:


Weather App
Enter city name...
Get Weather
Enter a city name and click "Get Weather" to see the current conditions.


Weather App
Bangalore
Get Weather
Bengaluru, IN
23.98°C
Overcast clouds
Humidity: 90%
Wind Speed: 5.7 m/s