# 1. Form Validation (Check if Input is Empty)

📌 *Ensures the user enters a value before submitting.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Form Validation</title>
</head>
<body>
    <form onsubmit="return validateForm()">
        <input type="text" id="name" placeholder="Enter your name">
        <button type="submit">Submit</button>
    </form>

    <script>
        function validateForm() {
            const input = document.getElementById('name').value;
            if (input.trim() === '') {
                alert('Name cannot be empty!');
                return false;
            }
            return true;
        }
    </script>
</body>
</html>
```

---

# 2. Password Strength Checker

📌 *Checks if a password meets security standards.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Password Strength Checker</title>
</head>
<body>
    <input type="password" id="password" placeholder="Enter password">
    <p id="result"></p>

    <script>
        document.getElementById('password').addEventListener('input',
function () {
            const password = this.value;
            const regex = /^(?=.*[A-Z])(?=.*\d)(?=.*[@$!%*?&])[A-Za-
z\d@$!%*?&]{8,}$/;
            document.getElementById('result').innerText =
regex.test(password) ? 'Strong Password' : 'Weak Password';
        });
    </script>
</body>
```

```
</html>
```

---

# 3. Countdown Timer

📌 *Creates a countdown timer that updates every second.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Countdown Timer</title>
</head>
<body>
    <p id="timer"></p>
    <button onclick="startCountdown(5)">Start Countdown</button>

    <script>
        function startCountdown(seconds) {
            let timer = setInterval(() => {
                document.getElementById('timer').innerText = seconds;
                seconds--;
                if (seconds < 0) {
                    clearInterval(timer);
                    document.getElementById('timer').innerText = 'Time’s
up!';
                }
            }, 1000);
        }
    </script>
</body>
</html>
```

---

# 4. Detect User Inactivity (Auto Logout)

📌 *Logs out the user if inactive for 5 seconds.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Auto Logout</title>
</head>
<body>
    <p>Move your mouse or press a key to stay logged in.</p>

    <script>
        let timeout;
        function resetTimer() {
            clearTimeout(timeout);
            timeout = setTimeout(() => alert('You have been logged out!'),
5000);
        }
```

```
        document.addEventListener('mousemove', resetTimer);
        document.addEventListener('keypress', resetTimer);
        resetTimer();
    </script>
</body>
</html>
```

---

# 5. Fetch and Display API Data

📌 *Fetches data from an API and displays it.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Fetch API Data</title>
</head>
<body>
    <button onclick="fetchData()">Fetch Data</button>
    <p id="data"></p>

    <script>
        async function fetchData() {
            const response = await
fetch('https://jsonplaceholder.typicode.com/todos/1');
            const data = await response.json();
            document.getElementById('data').innerText = JSON.stringify(data);
        }
    </script>
</body>
</html>
```

---

# 6. Dark Mode Toggle

📌 *Toggles dark mode on button click.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Dark Mode Toggle</title>
    <style>
        .dark-mode { background-color: black; color: white; }
    </style>
</head>
<body>
    <button onclick="toggleTheme()">Toggle Dark Mode</button>

    <script>
        function toggleTheme() {
            document.body.classList.toggle('dark-mode');
        }
```

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

---

# 7. Debounced Search (Optimized Input Handling)

📌 *Delays search requests to avoid excessive API calls.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Debounced Search</title>
</head>
<body>
    <input type="text" id="searchBox" placeholder="Search...">
    <p id="result"></p>

    <script>
        function debounce(func, delay) {
            let timer;
            return function (...args) {
                clearTimeout(timer);
                timer = setTimeout(() => func.apply(this, args), delay);
            };
        }

        const search = debounce((query) => {
            document.getElementById('result').innerText = `Searching for:
${query}`;
        }, 500);

        document.getElementById('searchBox').addEventListener('input', (e) =>
{
            search(e.target.value);
        });
    </script>
</body>
</html>
```

---

# 8. Image Lazy Loading

📌 *Loads images only when they are in view.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Lazy Loading</title>
</head>
<body>
```

```
    <img data-src="https://via.placeholder.com/300" width="300" alt="Lazy
Image">

    <script>
        document.addEventListener('DOMContentLoaded', function () {
            const images = document.querySelectorAll('img[data-src]');
            const observer = new IntersectionObserver(entries => {
                entries.forEach(entry => {
                    if (entry.isIntersecting) {
                        entry.target.src = entry.target.getAttribute('data-
src');
                        observer.unobserve(entry.target);
                    }
                });
            });
            images.forEach(img => observer.observe(img));
        });
    </script>
</body>
</html>
```

---

# 9. Drag and Drop Element

📌 *Allows dragging and dropping an element.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Drag & Drop</title>
    <style>
        #dragItem { width: 100px; height: 100px; background: blue; color:
white; text-align: center; }
        #dropZone { width: 200px; height: 200px; border: 2px dashed black;
margin-top: 10px; }
    </style>
</head>
<body>
    <div id="dragItem" draggable="true">Drag Me</div>
    <div id="dropZone"></div>

    <script>
        document.getElementById('dragItem').addEventListener('dragstart', (e)
=> {
            e.dataTransfer.setData('text/plain', e.target.id);
        });

        document.getElementById('dropZone').addEventListener('dragover', (e)
=> {
            e.preventDefault();
        });

        document.getElementById('dropZone').addEventListener('drop', (e) => {
            e.preventDefault();
```

```
            const draggedItem =
document.getElementById(e.dataTransfer.getData('text'));
            e.target.appendChild(draggedItem);
        });
    </script>
</body>
</html>
```

---

# 10. Generate Random OTP

📌 *Generates a random 6-digit OTP.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>OTP Generator</title>
</head>
<body>
    <button onclick="generateOTP()">Generate OTP</button>
    <p id="otp"></p>

    <script>
        function generateOTP(length = 6) {
            let otp = '';
            for (let i = 0; i < length; i++) {
                otp += Math.floor(Math.random() * 10);
            }
            document.getElementById('otp').innerText = `Your OTP: ${otp}`;
        }
    </script>
</body>
</html>
```

# 11. To-Do List Application

📌 *Allows users to add and remove tasks.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>To-Do List</title>
</head>
<body>
    <input type="text" id="taskInput" placeholder="Enter a task">
    <button onclick="addTask()">Add Task</button>
    <ul id="taskList"></ul>

    <script>
        function addTask() {
            const task = document.getElementById('taskInput').value;
            if (!task) return;
            const li = document.createElement('li');
            li.textContent = task;
            li.onclick = () => li.remove();
            document.getElementById('taskList').appendChild(li);
            document.getElementById('taskInput').value = '';
        }
    </script>
</body>
</html>
```

---

# 12. Show/Hide Password

📌 *Toggles password visibility.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Show/Hide Password</title>
</head>
<body>
    <input type="password" id="password">
    <button onclick="togglePassword()">Show/Hide</button>

    <script>
        function togglePassword() {
            const pass = document.getElementById('password');
            pass.type = pass.type === 'password' ? 'text' : 'password';
        }
    </script>
</body>
</html>
```

---

# 13. Random Quote Generator

📌 *Displays a random quote on button click.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Random Quote</title>
</head>
<body>
    <p id="quote"></p>
    <button onclick="generateQuote()">New Quote</button>

    <script>
        const quotes = ["Stay positive!", "Keep going!", "You can do it!",
"Believe in yourself!"];
        function generateQuote() {
            document.getElementById('quote').innerText =
quotes[Math.floor(Math.random() * quotes.length)];
        }
    </script>
</body>
</html>
```

---

# 14. Image Slider

📌 *Allows users to navigate through images.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Image Slider</title>
</head>
<body>
    <img id="slider" src="https://via.placeholder.com/300" width="300">
    <button onclick="prev()">Prev</button>
    <button onclick="next()">Next</button>

    <script>
```

```
        const images = ["https://via.placeholder.com/300/FF0000",
"https://via.placeholder.com/300/00FF00",
"https://via.placeholder.com/300/0000FF"];
        let index = 0;

        function prev() {
            index = (index - 1 + images.length) % images.length;
            document.getElementById('slider').src = images[index];
        }

        function next() {
            index = (index + 1) % images.length;
            document.getElementById('slider').src = images[index];
        }
    </script>
</body>
</html>
```

---

# 15. Modal Popup

📌 *Displays a modal when a button is clicked.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Modal Popup</title>
    <style>
        #modal { display: none; position: fixed; top: 20%; left: 50%;
transform: translate(-50%, -20%); padding: 20px; background: white; border:
1px solid black; }
    </style>
</head>
<body>
    <button onclick="openModal()">Open Modal</button>
    <div id="modal">
        <p>This is a modal!</p>
        <button onclick="closeModal()">Close</button>
    </div>

    <script>
        function openModal() { document.getElementById('modal').style.display
= 'block'; }
        function closeModal() {
document.getElementById('modal').style.display = 'none'; }
    </script>
</body>
</html>
```

---

# 16. Copy to Clipboard

📌 *Copies text to the clipboard when a button is clicked.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Copy to Clipboard</title>
</head>
<body>
    <input type="text" id="textToCopy" value="Hello, World!">
    <button onclick="copyText()">Copy</button>

    <script>
        function copyText() {
            const text = document.getElementById('textToCopy');
            text.select();
            document.execCommand('copy');
            alert('Copied!');
        }
    </script>
</body>
</html>
```

---

# 17. Digital Clock

📌 *Displays the current time dynamically.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Digital Clock</title>
</head>
<body>
    <h1 id="clock"></h1>

    <script>
        function updateClock() {
            document.getElementById('clock').innerText = new
Date().toLocaleTimeString();
        }
        setInterval(updateClock, 1000);
        updateClock();
    </script>
</body>
</html>
```

---

# 18. Weather API (Fetch Data)

📌 *Fetches and displays weather information.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Weather API</title>
</head>
<body>
    <button onclick="fetchWeather()">Get Weather</button>
    <p id="weather"></p>

    <script>
        async function fetchWeather() {
            const response = await fetch('https://api.open-
meteo.com/v1/forecast?latitude=40.7128&longitude=-
74.0060&current_weather=true');
            const data = await response.json();
            document.getElementById('weather').innerText = `Temp:
${data.current_weather.temperature}°C`;
        }
    </script>
</body>
</html>
```

---

# 19. Word Counter

📌 *Counts words in a textarea.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Word Counter</title>
</head>
<body>
    <textarea id="textArea" oninput="countWords()"></textarea>
    <p>Word count: <span id="wordCount">0</span></p>

    <script>
        function countWords() {
            const text = document.getElementById('textArea').value.trim();
            const words = text ? text.split(/\s+/).length : 0;
            document.getElementById('wordCount').innerText = words;
        }
    </script>
```

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

---

# 20. BMI Calculator

📌 *Calculates Body Mass Index (BMI).*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>BMI Calculator</title>
</head>
<body>
    <input type="number" id="weight" placeholder="Weight (kg)">
    <input type="number" id="height" placeholder="Height (m)">
    <button onclick="calculateBMI()">Calculate</button>
    <p id="bmi"></p>

    <script>
        function calculateBMI() {
            const weight =
parseFloat(document.getElementById('weight').value);
            const height =
parseFloat(document.getElementById('height').value);
            if (!weight || !height) return alert('Enter valid values');
            const bmi = (weight / (height * height)).toFixed(2);
            document.getElementById('bmi').innerText = `Your BMI: ${bmi}`;
        }
    </script>
</body>
</html>
```

# 21. StopWatch

📌 *A simple stopwatch to start, stop, and reset time.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Stopwatch</title>
</head>
<body>
    <h1 id="display">00:00:00</h1>
    <button onclick="start()">Start</button>
    <button onclick="stop()">Stop</button>
    <button onclick="reset()">Reset</button>

    <script>
        let timer, seconds = 0, minutes = 0, hours = 0;

        function updateTime() {
            seconds++;
            if (seconds === 60) { seconds = 0; minutes++; }
            if (minutes === 60) { minutes = 0; hours++; }
            document.getElementById('display').innerText =
`${String(hours).padStart(2, '0')}:${String(minutes).padStart(2,
'0')}:${String(seconds).padStart(2, '0')}`;
        }

        function start() { if (!timer) timer = setInterval(updateTime, 1000);
}
        function stop() { clearInterval(timer); timer = null; }
        function reset() { stop(); seconds = minutes = hours = 0;
updateTime(); }
    </script>
</body>
</html>
```

---

# 22. Character Counter

📌 *Counts the number of characters entered in a text field.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Character Counter</title>
</head>
<body>
    <textarea id="textArea" oninput="countChars()"></textarea>
    <p>Characters: <span id="charCount">0</span></p>
```

```
    <script>
        function countChars() {
            document.getElementById('charCount').innerText =
document.getElementById('textArea').value.length;
        }
    </script>
</body>
</html>
```

---

# 23. Background Color Changer

📌 *Changes the background color randomly when a button is clicked.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Background Color Changer</title>
</head>
<body>
    <button onclick="changeColor()">Change Background</button>

    <script>
        function changeColor() {
            document.body.style.backgroundColor =
`#${Math.floor(Math.random()*16777215).toString(16)}`;
        }
    </script>
</body>
</html>
```

---

# 24. Local Storage Example

📌 *Saves and retrieves user input from local storage.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Local Storage Example</title>
</head>
<body>
    <input type="text" id="inputData">
    <button onclick="saveData()">Save</button>
    <button onclick="loadData()">Load</button>
    <p id="savedData"></p>

    <script>
        function saveData() {
            localStorage.setItem('data',
document.getElementById('inputData').value);
        }
```

```
        function loadData() {
            document.getElementById('savedData').innerText =
localStorage.getItem('data') || 'No Data';
        }
    </script>
</body>
</html>
```

---

# 25. Light & Dark Mode Toggle (With Local Storage)

📌 *Persists theme preference even after reload.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Light/Dark Mode</title>
    <style>
        body.dark-mode { background: black; color: white; }
    </style>
</head>
<body>
    <button onclick="toggleTheme()">Toggle Theme</button>

    <script>
        function toggleTheme() {
            document.body.classList.toggle('dark-mode');
            localStorage.setItem('theme',
document.body.classList.contains('dark-mode') ? 'dark' : 'light');
        }
        document.body.classList.toggle('dark-mode',
localStorage.getItem('theme') === 'dark');
    </script>
</body>
</html>
```

---

# 26. Dynamic Table Row Addition

📌 *Adds rows dynamically to an HTML table.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Dynamic Table</title>
</head>
<body>
    <table border="1">
        <thead>
            <tr><th>Name</th><th>Age</th></tr>
        </thead>
        <tbody id="tableBody"></tbody>
```

```
    </table>
    <input type="text" id="name" placeholder="Enter Name">
    <input type="number" id="age" placeholder="Enter Age">
    <button onclick="addRow()">Add Row</button>

    <script>
        function addRow() {
            const name = document.getElementById('name').value;
            const age = document.getElementById('age').value;
            if (!name || !age) return alert("Enter valid values");

            const row = document.createElement('tr');
            row.innerHTML = `<td>${name}</td><td>${age}</td>`;
            document.getElementById('tableBody').appendChild(row);
        }
    </script>
</body>
</html>
```

---

# 27. Random Dice Roll

📌 *Simulates rolling a dice (1-6) when clicked.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Dice Roll</title>
</head>
<body>
    <button onclick="rollDice()">Roll Dice</button>
    <p id="diceResult"></p>

    <script>
        function rollDice() {
            document.getElementById('diceResult').innerText = `You rolled:
${Math.floor(Math.random() * 6) + 1}`;
        }
    </script>
</body>
</html>
```

---

# 28. Word Scramble Game

📌 *Scrambles a word for the user to guess.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Word Scramble Game</title>
</head>
```

```
<body>
    <p id="scrambledWord"></p>
    <input type="text" id="guess" placeholder="Your guess">
    <button onclick="checkGuess()">Check</button>
    <p id="result"></p>

    <script>
        const words = ["javascript", "programming", "developer",
"algorithm"];
        let originalWord = words[Math.floor(Math.random() * words.length)];
        document.getElementById('scrambledWord').innerText =
originalWord.split('').sort(() => Math.random() - 0.5).join('');

        function checkGuess() {
            const guess =
document.getElementById('guess').value.toLowerCase();
            document.getElementById('result').innerText = guess ===
originalWord ? "Correct!" : "Try Again!";
        }
    </script>
</body>
</html>
```

---

# 29. Mouse Position Tracker

📌 *Tracks and displays the mouse position on the screen.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Mouse Position Tracker</title>
</head>
<body>
    <p id="position"></p>

    <script>
        document.addEventListener('mousemove', (event) => {
            document.getElementById('position').innerText = `X:
${event.clientX}, Y: ${event.clientY}`;
        });
    </script>
</body>
</html>
```

---

# 30. Fake Loading Spinner

📌 *Displays a loading spinner for 3 seconds before showing content.*

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

```
<head>
    <title>Fake Loading</title>
</head>
<body>
    <div id="spinner">Loading...</div>
    <div id="content" style="display:none;">Welcome to the site!</div>

    <script>
        setTimeout(() => {
            document.getElementById('spinner').style.display = 'none';
            document.getElementById('content').style.display = 'block';
        }, 3000);
    </script>
</body>
</html>
```

# 31. Temperature Converter

📌 *Converts Celsius to Fahrenheit and vice versa.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Temperature Converter</title>
</head>
<body>
    <input type="number" id="temp" placeholder="Enter Temperature">
    <select id="unit">
        <option value="C">Celsius</option>
        <option value="F">Fahrenheit</option>
    </select>
    <button onclick="convertTemp()">Convert</button>
    <p id="result"></p>

    <script>
        function convertTemp() {
            let temp = parseFloat(document.getElementById('temp').value);
            let unit = document.getElementById('unit').value;
            let converted = unit === 'C' ? (temp * 9/5) + 32 : (temp - 32) *
5/9;
            document.getElementById('result').innerText = `Converted
Temperature: ${converted.toFixed(2)}°${unit === 'C' ? 'F' : 'C'}`;
        }
    </script>
</body>
</html>
```

---

# 32. Age Calculator

📌 *Calculates the age based on input birth year.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Age Calculator</title>
</head>
<body>
    <input type="number" id="birthYear" placeholder="Enter Birth Year">
    <button onclick="calculateAge()">Calculate Age</button>
    <p id="ageResult"></p>

    <script>
        function calculateAge() {
            let birthYear = document.getElementById('birthYear').value;
            let age = new Date().getFullYear() - birthYear;
            document.getElementById('ageResult').innerText = `Your age is:
${age} years`;
        }
    </script>
</body>
</html>
```

---

# 33. Countdown Timer

📌 *Starts a countdown from the given seconds.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Countdown Timer</title>
</head>
<body>
    <input type="number" id="time" placeholder="Enter seconds">
    <button onclick="startCountdown()">Start</button>
    <h1 id="timer">0</h1>

    <script>
        let countdown;
        function startCountdown() {
            let time = document.getElementById('time').value;
            document.getElementById('timer').innerText = time;
            clearInterval(countdown);
            countdown = setInterval(() => {
                if (time > 0) {
                    time--;
                    document.getElementById('timer').innerText = time;
                } else {
                    clearInterval(countdown);
                }
            }, 1000);
        }
    </script>
</body>
</html>
```

---

# 34. Form Validation

📌 *Validates if name and email fields are filled.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Form Validation</title>
</head>
<body>
    <input type="text" id="name" placeholder="Enter Name">
    <input type="email" id="email" placeholder="Enter Email">
    <button onclick="validateForm()">Submit</button>
    <p id="error"></p>

    <script>
        function validateForm() {
            let name = document.getElementById('name').value;
            let email = document.getElementById('email').value;
            if (!name || !email) {
                document.getElementById('error').innerText = "All fields are
required!";
            } else {
                document.getElementById('error').innerText = "Form
Submitted!";
            }
        }
    </script>
</body>
</html>
```

---

# 35. Prime Number Checker

📌 *Checks if a number is prime or not.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Prime Number Checker</title>
</head>
<body>
    <input type="number" id="number" placeholder="Enter a number">
    <button onclick="checkPrime()">Check</button>
    <p id="result"></p>

    <script>
        function checkPrime() {
            let num = parseInt(document.getElementById('number').value);
```

```
            if (num < 2) return document.getElementById('result').innerText =
"Not Prime";
            for (let i = 2; i <= Math.sqrt(num); i++) {
                if (num % i === 0) return
document.getElementById('result').innerText = "Not Prime";
            }
            document.getElementById('result').innerText = "Prime Number";
        }
    </script>
</body>
</html>
```

---

# 36. Random Joke Generator (Using API)

📌 *Fetches and displays a random joke.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Joke Generator</title>
</head>
<body>
    <button onclick="fetchJoke()">Get Joke</button>
    <p id="joke"></p>

    <script>
        async function fetchJoke() {
            let response = await fetch('https://official-joke-
api.appspot.com/random_joke');
            let data = await response.json();
            document.getElementById('joke').innerText = `${data.setup} -
${data.punchline}`;
        }
    </script>
</body>
</html>
```

---

# 37. Palindrome Checker

📌 *Checks if a word is a palindrome.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Palindrome Checker</title>
</head>
<body>
    <input type="text" id="word" placeholder="Enter word">
    <button onclick="checkPalindrome()">Check</button>
    <p id="result"></p>
```

```
    <script>
        function checkPalindrome() {
            let word = document.getElementById('word').value.toLowerCase();
            let reversed = word.split('').reverse().join('');
            document.getElementById('result').innerText = word === reversed ?
"Palindrome" : "Not a Palindrome";
        }
    </script>
</body>
</html>
```

---

# 38. Tooltip on Hover

📌 *Displays a tooltip when hovering over text.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Tooltip Example</title>
    <style>
        .tooltip { position: relative; display: inline-block; }
        .tooltip .tooltiptext {
            visibility: hidden; background-color: black; color: white;
            position: absolute; padding: 5px; border-radius: 5px;
        }
        .tooltip:hover .tooltiptext { visibility: visible; }
    </style>
</head>
<body>
    <div class="tooltip">Hover over me
        <span class="tooltiptext">Tooltip text</span>
    </div>
</body>
</html>
```

---

# 39. Guess the Number Game

📌 *A simple number guessing game.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Guess the Number</title>
</head>
<body>
    <input type="number" id="guess" placeholder="Enter a number (1-10)">
    <button onclick="checkGuess()">Check</button>
    <p id="result"></p>
```

```
    <script>
        let secretNumber = Math.floor(Math.random() * 10) + 1;
        function checkGuess() {
            let guess = document.getElementById('guess').value;
            document.getElementById('result').innerText = guess ==
secretNumber ? "Correct!" : "Try Again!";
        }
    </script>
</body>
</html>
```

---

# 40. Detect Online/Offline Status

📌 *Checks internet connection status dynamically.*

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Internet Status</title>
</head>
<body>
    <p id="status"></p>

    <script>
        function updateStatus() {
            document.getElementById('status').innerText = navigator.onLine ?
"Online" : "Offline";
        }
        window.addEventListener('online', updateStatus);
        window.addEventListener('offline', updateStatus);
        updateStatus();
    </script>
</body>
</html>
```