

1. Calculadora Básica en JavaScript

```
<!DOCTYPE html>
<html lang="es">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-
scale=1.0">
  <title>Calculadora Básica</title>
  <style>
    input, button {
      padding: 10px;
      margin: 5px;
    }
    #result {
      width: 220px;
      text-align: right;
    }
  </style>
</head>
<body>
  <h1>Calculadora Básica</h1>
  <input type="text" id="result" disabled/>
  <br/>
  <button onclick="appendNumber(1)">1</button>
  <button onclick="appendNumber(2)">2</button>
  <button onclick="appendNumber(3)">3</button>
  <button onclick="appendNumber('+')">+</button>
  <br/>
  <button onclick="appendNumber(4)">4</button>
  <button onclick="appendNumber(5)">5</button>
  <button onclick="appendNumber(6)">6</button>
  <button onclick="appendNumber('-')">-</button>
  <br/>
  <button onclick="appendNumber(7)">7</button>
  <button onclick="appendNumber(8)">8</button>
  <button onclick="appendNumber(9)">9</button>
  <button onclick="appendNumber('*')">*</button>
  <br/>
  <button onclick="appendNumber(0)">0</button>
  <button onclick="clearResult()">C</button>
  <button onclick="calculate()">=</button>
  <button onclick="appendNumber('/')">/</button>

  <script>
    let resultField = document.getElementById("result");
    let currentInput = "";

    function appendNumber(number) {
      currentInput += number;
      resultField.value = currentInput;
    }

    function clearResult() {
      currentInput = "";
      resultField.value = "";
    }
  </script>
</body>
</html>
```

```

        function calculate() {
            try {
                currentInput = eval(currentInput).toString();
                resultField.value = currentInput;
            } catch (e) {
                resultField.value = "Error";
            }
        }
    }
</script>
</body>
</html>

```

2. Generador de Contraseñas Aleatorias en JavaScript

```

<!DOCTYPE html>
<html lang="es">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    <title>Generador de Contraseñas</title>
    <style>
        button {
            padding: 10px;
            margin-top: 10px;
        }
    </style>
</head>
<body>
    <h1>Generador de Contraseñas Aleatorias</h1>
    <input type="text" id="password" disabled/>
    <br/>
    <button onclick="generatePassword()">Generar Contraseña</button>

    <script>
        function generatePassword() {
            const charset =
"abcdefghijklmnopqrstuvwxyzABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789!@#$$%^&*()
_+";
            let password = "";
            const passwordLength = 12; // Cambia el valor si quieres una
contraseña más larga o corta

            for (let i = 0; i < passwordLength; i++) {
                const randomIndex = Math.floor(Math.random() *
charset.length);
                password += charset[randomIndex];
            }

            document.getElementById("password").value = password;
        }
    </script>
</body>
</html>

```

3. Contador de Palabras en un Texto

```
<!DOCTYPE html>
<html lang="es">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-
scale=1.0">
  <title>Contador de Palabras</title>
  <style>
    textarea {
      width: 300px;
      height: 100px;
      margin-bottom: 10px;
    }
    button {
      padding: 10px;
    }
  </style>
</head>
<body>
  <h1>Contador de Palabras</h1>
  <textarea id="text" placeholder="Escribe tu texto
aquí..."></textarea>
  <br/>
  <button onclick="countWords()">Contar Palabras</button>
  <p id="wordCount">Palabras: 0</p>

  <script>
    function countWords() {
      const text = document.getElementById("text").value.trim();
      const words = text.split(/\s+/);
      const wordCount = words.length > 1 || words[0] !== "" ?
words.length : 0;
      document.getElementById("wordCount").textContent = "Palabras:
" + wordCount;
    }
  </script>
</body>
</html>
```

4. Juego de Adivinar el Número

```
<!DOCTYPE html>
<html lang="es">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-
scale=1.0">
  <title>Juego: Adivina el Número</title>
  <style>
    button, input {
      padding: 10px;
      margin: 10px;
    }
    #result {
```

```

        font-weight: bold;
    }
</style>
</head>
<body>
    <h1>Juego: Adivina el Número</h1>
    <p>He elegido un número entre 1 y 100. Tienes 10 intentos para
    adivinarlo.</p>
    <input type="number" id="guess" min="1" max="100"
    placeholder="Ingresa tu número"/>
    <button onclick="checkGuess()">Adivinar</button>
    <p id="result"></p>
    <p>Intentos restantes: <span id="attempts">10</span></p>

    <script>
        let secretNumber = Math.floor(Math.random() * 100) + 1;
        let attemptsLeft = 10;

        function checkGuess() {
            const guess =
parseInt(document.getElementById("guess").value);
            const resultText = document.getElementById("result");
            const attemptsElement = document.getElementById("attempts");

            if (isNaN(guess) || guess < 1 || guess > 100) {
                resultText.textContent = "Por favor, ingresa un número
válido entre 1 y 100.";
                return;
            }

            attemptsLeft--;
            attemptsElement.textContent = attemptsLeft;

            if (guess === secretNumber) {
                resultText.textContent = "¡Felicidades! Has adivinado el
número.";
                resultText.style.color = "green";
            } else if (guess < secretNumber) {
                resultText.textContent = "Demasiado bajo. Intenta de
nuevo.";
                resultText.style.color = "orange";
            } else {
                resultText.textContent = "Demasiado alto. Intenta de
nuevo.";
                resultText.style.color = "orange";
            }

            if (attemptsLeft === 0 && guess !== secretNumber) {
                resultText.textContent = "¡Has perdido! El número
correcto era " + secretNumber + ".";
                resultText.style.color = "red";
            }
        }
    </script>
</body>
</html>

```

5. Simulador de Reloj Digital

```
<!DOCTYPE html>
<html lang="es">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-
scale=1.0">
  <title>Reloj Digital</title>
  <style>
    #clock {
      font-size: 3em;
      font-family: 'Arial', sans-serif;
      text-align: center;
      margin-top: 20%;
    }
  </style>
</head>
<body>
  <div id="clock"></div>

  <script>
    function updateClock() {
      const now = new Date();
      let hours = now.getHours();
      let minutes = now.getMinutes();
      let seconds = now.getSeconds();

      // Formatear la hora, minutos y segundos con 2 dígitos
      hours = hours < 10 ? '0' + hours : hours;
      minutes = minutes < 10 ? '0' + minutes : minutes;
      seconds = seconds < 10 ? '0' + seconds : seconds;

      const timeString = hours + ':' + minutes + ':' + seconds;

      document.getElementById('clock').textContent = timeString;
    }

    // Actualiza el reloj cada segundo
    setInterval(updateClock, 1000);
  </script>
</body>
</html>
```

6. Contador de Palabras en un Texto (Versión Mejorada)

```
<!DOCTYPE html>
<html lang="es">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-
scale=1.0">
  <title>Contador de Palabras</title>
  <style>
    textarea {
      width: 100%;
      height: 150px;
```

```

        padding: 10px;
        font-size: 16px;
    }
    #wordCount {
        margin-top: 10px;
        font-size: 1.2em;
    }
</style>
</head>
<body>
    <h1>Contador de Palabras</h1>
    <textarea id="text" placeholder="Escribe aquí..."></textarea>
    <div id="wordCount">Palabras: 0</div>

    <script>
        document.getElementById('text').addEventListener('input',
function() {
            const text = this.value.trim();
            const wordCount = text ? text.split(/\s+/).length : 0;
            document.getElementById('wordCount').textContent = "Palabras:
" + wordCount;
        });
    </script>
</body>
</html>

```

7. Formulario de Contacto con Validación

```

<!DOCTYPE html>
<html lang="es">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    <title>Formulario de Contacto</title>
    <style>
        input, textarea {
            padding: 10px;
            margin: 5px;
            width: 100%;
            box-sizing: border-box;
        }
        button {
            padding: 10px 20px;
        }
        #error {
            color: red;
        }
    </style>
</head>
<body>
    <h1>Formulario de Contacto</h1>
    <form id="contactForm">
        <label for="name">Nombre:</label>
        <input type="text" id="name" name="name" placeholder="Tu nombre"
required>

```

```

        <br/>
        <label for="email">Correo electrónico:</label>
        <input type="email" id="email" name="email" placeholder="Tu
correo" required>
        <br/>
        <label for="message">Mensaje:</label>
        <textarea id="message" name="message" placeholder="Escribe tu
mensaje" required></textarea>
        <br/>
        <button type="submit">Enviar</button>
    </form>
    <div id="error"></div>

    <script>
        document.getElementById('contactForm').addEventListener('submit',
function(event) {
            event.preventDefault(); // Evita que el formulario se envíe

            const name = document.getElementById('name').value;
            const email = document.getElementById('email').value;
            const message = document.getElementById('message').value;

            if (!name || !email || !message) {
                document.getElementById('error').textContent = "Por
favor, completa todos los campos.";
            } else {
                document.getElementById('error').textContent = "";
                alert("Formulario enviado correctamente.");
            }
        });
    </script>
</body>
</html>

```