**Exercise 8:**

**TASK 1:  
CODE:**<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

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

    <title>Document</title>

</head>

<body>

    <div style="margin-top: 30px; display:block,font-size: 20px; text-align: center;">

        <h1>Find the Greatest of Two Numbers</h1>

    <input type="number" id="num1" placeholder="Enter first number" style="font-size: 1em; padding: 8px; width: 250px;">

    <br><br>

    <input type="number" id="num2" placeholder="Enter second number" style="font-size: 1em; padding: 8px; width: 250px;">

    <br><br>

    <button onclick="findBigger()" style="font-size: 1em; padding: 10px 30px;">Find Bigger</button>

    <br><br>

    <span id="biggerResult" style="font-size: 1.3em; font-weight: bold;"></span>

  </div>

  <script>

    function findBigger() {

      const n1 = parseFloat(document.getElementById('num1').value);

      const n2 = parseFloat(document.getElementById('num2').value);

      let result = '';

      if (isNaN(n1) || isNaN(n2)) {

        result = 'Please enter both numbers.';

      } else if (n1 > n2) {

        result = n1 + ' is bigger';

      } else if (n2 > n1) {

        result = n2 + ' is bigger';

      } else {

        result = 'Both numbers are equal';

      }

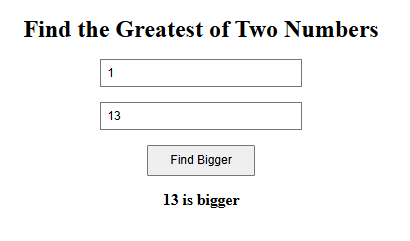
      document.getElementById('biggerResult').textContent = result;

    }

  </script>

</body>

</html>

**OUTPUT:  
**

**TASK 2:**

**CODE:**

**HTML:**

<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

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

  <title>Scientific Calculator</title>

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

</head>

<body>

  <div class="calculator">

    <input type="text" id="display" class="display" readonly>

    <div class="keys">

      <button onclick="clearDisplay()" style="background-color: aqua;">AC</button>

      <button onclick="appendToDisplay('%')">%</button>

      <button onclick="appendToDisplay('\*\*')">^</button>

      <button onclick="appendToDisplay('/')">/</button>

      <button onclick="appendToDisplay('7')">7</button>

      <button onclick="appendToDisplay('8')">8</button>

      <button onclick="appendToDisplay('9')">9</button>

      <button onclick="appendToDisplay('\*')">\*</button>

      <button onclick="appendToDisplay('4')">4</button>

      <button onclick="appendToDisplay('5')">5</button>

      <button onclick="appendToDisplay('6')">6</button>

      <button onclick="appendToDisplay('-')">-</button>

      <button onclick="appendToDisplay('1')">1</button>

      <button onclick="appendToDisplay('2')">2</button>

      <button onclick="appendToDisplay('3')">3</button>

      <button onclick="appendToDisplay('+')">+</button>

      <button onclick="appendToDisplay('0')">0</button>

      <button onclick="appendToDisplay('.')">.</button>

      <button onclick="squareRoot()">√</button>

      <button onclick="square()">x²</button>

      <button onclick="log()">log</button>

      <button onclick="sin()">sin</button>

      <button onclick="cos()">cos</button>

      <button onclick="tan()">tan</button>

      <button onclick="calculate()" style="background-color: aqua;">=</button>

    </div>

  </div>

  <script src="script.js"></script>

</body>

</html>

**JS:**

let display = document.getElementById('display');

function appendToDisplay(value) {

  display.value += value;

}

function clearDisplay() {

  display.value = '';

}

function calculate() {

  try {

    display.value = eval(display.value);

  } catch (error) {

    display.value = 'Error';

  }

}

function squareRoot() {

  try {

    display.value = Math.sqrt(eval(display.value));

  } catch {

    display.value = 'Error';

  }

}

function square() {

  try {

    let val = eval(display.value);

    display.value = val \* val;

  } catch {

    display.value = 'Error';

  }

}

function log() {

  try {

    display.value = Math.log10(eval(display.value));

  } catch {

    display.value = 'Error';

  }

}

function sin() {

  try {

    display.value = Math.sin(toRadians(eval(display.value)));

  } catch {

    display.value = 'Error';

  }

}

function cos() {

  try {

    display.value = Math.cos(toRadians(eval(display.value)));

  } catch {

    display.value = 'Error';

  }

}

function tan() {

  try {

    display.value = Math.tan(toRadians(eval(display.value)));

  } catch {

    display.value = 'Error';

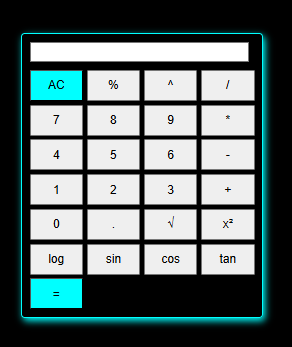
  }

}

function toRadians(degrees) {

  return degrees \* (Math.PI / 180);

}

**OUTPUT:  
**