**ASSIGNMENT-7**

**Source Code:-**

**HTML**

<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

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

  <title>BMI Calculator with Dial Gauge</title>

  <link rel="stylesheet" href="BMI\_Calculator.css">

</head>

<body>

  <div class="container">

   <h1 style="color: #873981;">BMI Calculator</h1>

    <div class="input-group">

      <label for="height">Height (cm):</label>

      <input type="number" id="height" placeholder="Enter your height in cm">

    </div>

    <div class="input-group">

      <label for="weight">Weight (kg):</label>

      <input type="number" id="weight" placeholder="Enter your weight in kg">

    </div>

    <button onclick="calculateBMI()">Calculate BMI</button>

    <div id="result"></div>

    <div id="status"></div>

    <div class="scale-gauge-container">

      <img src="8.png" alt="Dial Gauge" class="scale-gauge" />

      <div class="pointer" id="pointer"></div>

    </div>

  </div>

  <script src="BMI\_Calculator.js"></script>

</body>

</html>

**CSS**

\* {

    margin: 0;

    padding: 0;

    font-family: "Garamond", serif;

    box-sizing: border-box;

  }

  body {

    background: #cec5d1;

    height: 100vh;

    display: flex;

    align-items: center;

    justify-content: center;

    display: flex;

    place-items: center;

    background-image: url('9.png');

    background-size: cover;

    background-position: center;

    background-repeat: no-repeat;

    font-family: "didot", serif;

  }

    .container {

    text-align: center;

    background-color: white;

    padding: 100px;

    border-radius: 10px;

    box-shadow: 0 0 15px rgba(0, 0, 0, 0.1);

  }

    .input-group {

    margin-bottom: 10px;

  }

  button {

    margin-top: 10px;

    padding: 10px 20px;

    font-size: 16px;

    cursor: pointer;

  }

    .scale-gauge-container {

    position: relative;

    width: 200px;

    height: 200px;

    margin: 20px auto;

  }

    .scale-gauge {

    width: 100%;

    height: 100%;

    display: block;

    position: absolute;

    top: 0;

    left: 0;

  }

  .pointer {

    position: absolute;

    width: 0;

    height: 0;

    border-left: 10px solid transparent;

    border-right: 10px solid transparent;

    border-bottom: 50px solid black;

    top: 50%;

    left: 50%;

    z-index: 1;

    transform-origin: bottom center;

    transform: rotate(0deg) translateX(-50%);

    transition: transform 1s ease-out;

  }

#result {

    margin-top: 20px;

    font-size: 18px;

    font-weight: bold;

  }

#status {

    margin-top: 5px;

    font-size: 16px;

    color: #666;

  }

**JAVASCRIPT**

function calculateBMI() {

  const height = parseFloat(document.getElementById('height').value) / 100;

  const weight = parseFloat(document.getElementById('weight').value);

if (!height || !weight) {

    alert("Please enter valid height and weight!");

    return;

  }

const bmi = weight / (height \* height);

  document.getElementById('result').innerHTML = `Your BMI is ${bmi.toFixed(1)}`;

displayBMIStatus(bmi);

  movePointer(bmi);

}

function displayBMIStatus(bmi) {

  const statusElement = document.getElementById('status');

  let status = "";

  if (bmi < 18.5) {

    status = "Underweight";

  } else if (bmi >= 18.5 && bmi < 25) {

    status = "Normal weight";

  } else if (bmi >= 25 && bmi < 30) {

    status = "Overweight";

  } else {

    status = "Obese";

  }

statusElement.innerHTML = `Status: ${status}`;

}

function movePointer(bmi) {

  const pointer = document.getElementById('pointer');

  let angle = 0;

  if (bmi < 18.5) {

    angle = -90;

  } else if (bmi >= 18.5 && bmi < 25) {

    angle = 0;

  } else if (bmi >= 25 && bmi < 30) {

    angle = 45;

  } else {

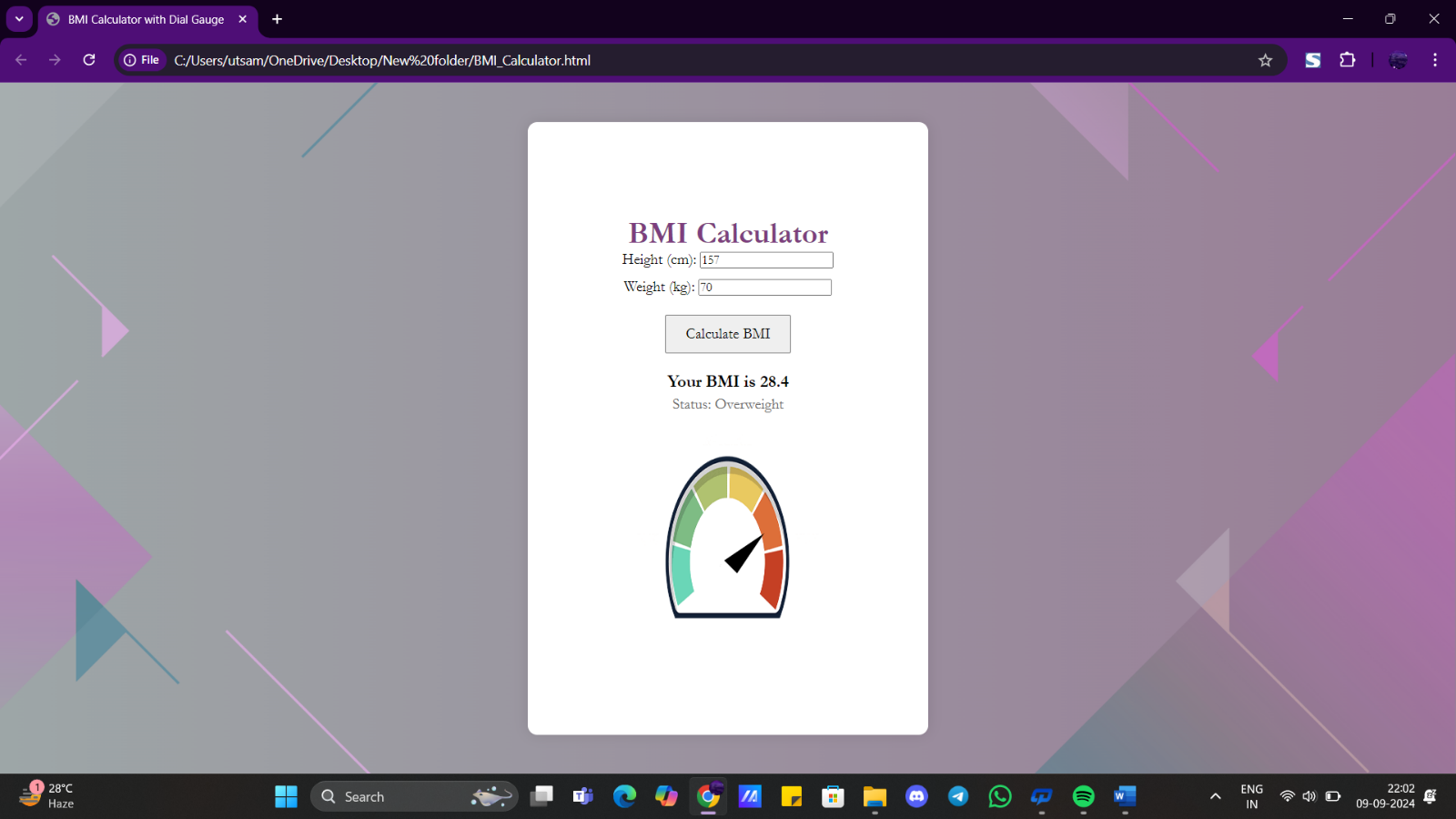
    angle = 90;

  }

pointer.style.transform = `rotate(${angle}deg) translateX(-50%)`;

}

**Output:-**

****