```
<!DOCTYPE html>
<html lang="ar">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width,
initial-scale=1.0">
  <title>حاسبة مقاس البخاخات</title>
  <script src="https://cdn.tailwindcss.com"></script>
  <link
href="https://fonts.googleapis.com/css2?family=Inter:wght@400;500;600;
700&display=swap" rel="stylesheet">
  <style>
    body {
      font-family: 'Inter', sans-serif;
      direction: rtl;
      margin: 0;
      padding: 0;
      background-color: #f0f4f8; /* Light blue-gray background */
      display: flex;
      flex-direction: column; /* Arrange items vertically */
      align-items: center; /* Center horizontally */
      min-height: 100vh;
    }
    .top-banner {
      width: 100%;
      background-color: #10B981; /* Emerald green */
      color: white;
      text-align: center;
      padding: 15px 20px;
      font-size: 1.75rem; /* Larger font size */
      font-weight: 700;
      box-shadow: 0 4px 6px rgba(0, 0, 0, 0.1);
      margin-bottom: 20px; /* Space between banner and content */
      border-bottom-left-radius: 12px; /* Rounded corners at bottom */
      border-bottom-right-radius: 12px;
    }
    .container {
      background-color: #ffffff;
      padding: 30px;
      border-radius: 12px;
      box-shadow: 0 10px 25px rgba(0, 0, 0, 0.1);
      width: 100%;
      max-width: 700px; /* Max width for better readability on large
screens */
      border: 1px solid #e2e8f0;
      margin-bottom: 20px; /* Add some margin at the bottom */
    }
    h2 {
```

```
      text-align: center;
      color: #2d3748; /* Darker text for headings */
      margin-bottom: 25px;
      font-size: 2rem;
      font-weight: 700;
    }
    label {
      display: block;
      margin: 15px 0 5px;
      font-weight: 600;
      color: #4a5568; /* Medium dark text */
      font-size: 0.95rem;
    }
    input[type="number"] {
      width: calc(100% - 20px); /* Adjust width for padding */
      padding: 10px;
      border: 1px solid #cbd5e0; /* Light gray border */
      border-radius: 8px;
      font-size: 1rem;
      color: #2d3748;
      box-shadow: inset 0 1px 3px rgba(0, 0, 0, 0.05);
      transition: border-color 0.2s, box-shadow 0.2s;
    }
    input[type="number"]:focus {
      border-color: #4299e1; /* Blue on focus */
      box-shadow: 0 0 0 3px rgba(66, 153, 225, 0.5); /* Blue glow on
focus */
      outline: none;
    }
    button {
      margin-top: 25px;
      padding: 12px 25px;
      background-color: #48bb78; /* Green button */
      color: white;
      border: none;
      border-radius: 8px;
      cursor: pointer;
      font-size: 1.1rem;
      font-weight: 700;
      transition: background-color 0.3s ease, transform 0.2s ease;
      width: 100%;
    }
    button:hover {
      background-color: #38a166; /* Darker green on hover */
      transform: translateY(-2px);
    }
    button:active {
      transform: translateY(0);
```

```
    }
    #waterRate {
      margin-top: 25px; /* Adjust margin for spacing */
      font-weight: bold;
      color: #2b6cb0; /* A nice blue color for the result */
      background-color: #e0f2fe; /* Light blue background for emphasis
*/
      padding: 12px;
      border-radius: 8px;
      text-align: center;
      font-size: 1.1rem;
      border: 1px solid #90cdf4;
    }
    table {
      border-collapse: separate; /* Use separate for rounded corners
*/
      border-spacing: 0;
      margin-top: 30px;
      width: 100%;
      box-shadow: 0 4px 10px rgba(0, 0, 0, 0.08);
      border-radius: 8px; /* Rounded corners for the table */
      overflow: hidden; /* Ensures content respects border-radius */
    }
    th, td {
      border: 1px solid #e2e8f0; /* Lighter border for table cells */
      padding: 12px;
      text-align: center;
      font-size: 0.9rem;
      color: #2d3748;
    }
    th {
      background-color: #edf2f7; /* Light gray header */
      font-weight: 700;
      color: #2d3748;
      text-transform: uppercase;
      letter-spacing: 0.05em;
    }
    tr:nth-child(even) {
      background-color: #f7fafc; /* Zebra striping for rows */
    }
    tr:hover {
      background-color: #ebf8ff; /* Light blue on row hover */
    }
    /* Specific rounded corners for table headers */
    th:first-child { border-top-right-radius: 8px; }
    th:last-child { border-top-left-radius: 8px; }
    /* Specific rounded corners for table body (if only one row) */
    tbody tr:last-child td:first-child { border-bottom-right-radius:
```

```
8px; }
    tbody tr:last-child td:last-child { border-bottom-left-radius:
8px; }

    /* Responsive adjustments */
    @media (max-width: 600px) {
      body {
        padding: 0; /* Remove padding from body for small screens */
      }
      .top-banner {
        font-size: 1.5rem;
        padding: 10px 15px;
      }
      .container {
        padding: 20px;
        margin: 15px; /* Add margin around container on small screens
*/
      }
      h2 {
        font-size: 1.75rem;
      }
      th, td {
        padding: 8px;
        font-size: 0.85rem;
      }
      #waterRate {
        font-size: 1rem;
      }
    }
  </style>
</head>
<body>
  <div class="top-banner">
    موقع (مزارع الخير الرسمي)
  </div>

  <div class="container">
    <h2>🧮 أداة حساب مقاس البخاخات وكمية الماء/م²</h2>

    <label for="numTowers">عدد الأبراج:</label>
    <input type="number" id="numTowers" value="6">

    <label for="towerLength">طول البرج (متر):</label>
    <input type="number" id="towerLength" value="54">

    <label for="sprinklersPerTower">عدد البخاخات في كل برج:</label>
    <input type="number" id="sprinklersPerTower" value="36">
```

```
    <label for="firstTowerDistance">المسافة من مركز الرشاش إلى أول برج
(متر)):</label>
    <input type="number" id="firstTowerDistance" value="20">

    <label for="totalGPM">كمية الماء الكلية (GPM):</label>
    <input type="number" id="totalGPM" value="1400">

    <label for="pivotSpeed">سرعة الرشاش (%):</label>
    <input type="number" id="pivotSpeed" value="100">

    <button onclick="calculate()">احسب</button>

    <p id="waterRate"></p>

    <table id="resultTable">
      <thead>
        <tr>
          <th>رقم البخاخ</th>
          <th>المسافة من المركز (متر)</th>
          <th>التصرف (GPM)</th>
          <th>مقاس النوزل (PSI) 10</th>
        </tr>
      </thead>
      <tbody></tbody>
    </table>
  </div>

  <script>
    function getNozzleSize(gpm) {
      if (gpm <= 1.0) return "#5";
      else if (gpm <= 1.5) return "#6";
      else if (gpm <= 2.2) return "#8";
      else if (gpm <= 3.0) return "#10";
      else if (gpm <= 4.2) return "#12";
      else if (gpm <= 5.6) return "#14";
      else if (gpm <= 7.3) return "#16";
      else if (gpm <= 9.3) return "#18";
      else return "> #18";
    }

    function calculate() {
      const numTowers =
parseInt(document.getElementById("numTowers").value);
      const towerLength =
parseFloat(document.getElementById("towerLength").value);
      const sprinklersPerTower =
parseInt(document.getElementById("sprinklersPerTower").value);
      const firstTowerDistance =
```

```
parseFloat(document.getElementById("firstTowerDistance").value);
      const totalGPM =
parseFloat(document.getElementById("totalGPM").value);
      const pivotSpeedPercent =
parseFloat(document.getElementById("pivotSpeed").value);

      // Input validation
      if (isNaN(numTowers) || numTowers <= 0 ||
          isNaN(towerLength) || towerLength <= 0 ||
          isNaN(sprinklersPerTower) || sprinklersPerTower <= 0 ||
          isNaN(firstTowerDistance) || firstTowerDistance < 0 ||
          isNaN(totalGPM) || totalGPM <= 0 ||
          isNaN(pivotSpeedPercent) || pivotSpeedPercent <= 0) { //
Added validation for pivotSpeed
        const waterRateElement = document.getElementById("waterRate");
        waterRateElement.style.color = '#dc2626'; // text-red-600
        waterRateElement.style.backgroundColor = '#fee2e2'; //
bg-red-100
        waterRateElement.style.borderColor = '#fca5a5'; //
border-red-300
        waterRateElement.innerText = "الرجاء إدخال قيم صحيحة وموجبة لجميع
الحقول.";
        document.querySelector("#resultTable tbody").innerHTML = "";
// Clear table
        return;
      }

      const totalSprinklers = numTowers * sprinklersPerTower;
      let positions = [];

      for (let i = 0; i < numTowers; i++) {
        const base = firstTowerDistance + i * towerLength;
        for (let j = 0; j < sprinklersPerTower; j++) {
          const offset = (j + 0.5) * (towerLength /
sprinklersPerTower);
          const distance = base + offset;
          positions.push(distance);
        }
      }

      const sumOfDistances = positions.reduce((sum, current) => sum +
current, 0);
      const lastDistance = positions[positions.length - 1];

      const tbody = document.querySelector("#resultTable tbody");
      tbody.innerHTML = ""; // Clear previous results

      positions.forEach((distance, index) => {
```

```
        const gpm = (distance / sumOfDistances) * totalGPM;
        const nozzle = getNozzleSize(gpm);
        const row = `<tr>
          <td>${index + 1}</td>
          <td>${distance.toFixed(2)}</td>
          <td>${gpm.toFixed(2)}</td>
          <td>${nozzle}</td>
        </tr>`;
        tbody.innerHTML += row;
      });

      // حساب كمية الماء بالمتر المربع بناءً على السرعة
      const totalLitersPerMinute = totalGPM * 3.78541; // تحويل GPM إلى
1) لتر/دقيقة GPM = 3.78541 لتر/دقيقة)
      // Assuming a base speed of 3 m/min for 100% pivot speed
      const pivotSpeedMPerMin = 3 * (pivotSpeedPercent / 100);
      const area = lastDistance * pivotSpeedMPerMin; // المساحة التقريبية التي
يغطيها الرشاش في الدقيقة

      let litersPerSqMeter = 0;
      if (area > 0) { // Avoid division by zero
        litersPerSqMeter = (totalLitersPerMinute / area).toFixed(2);
      } else {
        litersPerSqMeter = "غير قابل للحساب (المساحة صفر)";
      }

      const waterRateElement = document.getElementById("waterRate");
      // Reset styling for successful calculation
      waterRateElement.style.color = '#2b6cb0'; // A nice blue color
for the result
      waterRateElement.style.backgroundColor = '#e0f2fe'; // Light
blue background for emphasis
      waterRateElement.style.borderColor = '#90cdf4'; // Light blue
border
      waterRateElement.innerText =
        `كمية الماء التقريبية: ${litersPerSqMeter} لتر/م² بالدقيقة (بسرعة
${pivotSpeedMPerMin.toFixed(2)} م/د)`;
    }
  </script>
</body>
</html>
```