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<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <!-- This tutorial is about iterating on an array of objects, using for
loop -->
</head>
<body>
  <h2>Arrays and For Loops</h2>
  <h3>Table of Students and Grade</h3>
  <table>
    <tr>
      <th>Name</th>
      <th>Grade</th>
    </tr>
    <tr>
      <th class="name">John</th>
      <th class="grade">A</th>
    </tr>
    <tr>
      <th class="name">Jane</th>
      <th class="grade">B</th>
    </tr>
    <tr>
      <th class="name">Joe</th>
      <th class="grade">C</th>
    </tr>
    <tr>
      <th class="name">Jack</th>
      <th class="grade">D</th>
    </tr>
  </table>

  <p id="demo"></p>

  <script>
    let names = document.getElementsByClassName("name");
    let students = "";
    for(let i=0; i<names.length-1; i++){
      students += names[i].innerHTML + ", ";
    }
    students += names[names.length-1].innerHTML;
    students = "The students are: " + students + ".";
    document.getElementById("demo").innerHTML = students;
  </script>
</body>

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</html>
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<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Function</title>

</head>
<body>
  <h1>Square Root Calculator</h1>

  <label for="number">Enter a positive number: </label>
  <input type="number" name="number" id="number">
  <br>
  <button onclick="calculateSquareRoot()">Calculate Square Root</button>
  <p id="result"></p>

  <script src="functions.js"></script>
</body>
</html>
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function calculateSquareRoot() {
  var number = document.getElementById("number").value;
  var squareRoot = Math.sqrt(number);
  document.getElementById("result").innerHTML =
    "The square root of " + number + " is " + squareRoot;
}
```

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<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>

  <!-- Here we will demonstrate Event handling for UI Events
  which include mouseover, mouseout, mouseup, mousedown,
  keyup, keydown, click, dblclick. -->

  <style>
    #box1, #box2, #box3{
      width: 50px;
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        height: 50px;
        background-color: blue;
        position: relative;
        left: 0;
    }
</style>
</head>
<body>
    <h1>UI Events</h1>
    <div id="box1"></div>
    <br> <br>
    <div id="box2"></div>
    <br> <br>
    <div id="box3"></div>
    <br> <br>
    <p id="demo"></p>

    <script>
        let box1 = document.getElementById("box1");
        let box2 = document.getElementById("box2");
        let box3 = document.getElementById("box3");
        box1.addEventListener("mouseover", function(){
            box1.style.backgroundColor = "red";
        });

        box1.addEventListener("mouseout", function(){
            box1.style.backgroundColor = "blue";
        });

        box2.addEventListener("mousedown", function(){
            box2.style.backgroundColor = "green";
        });

        box2.addEventListener("mouseup", function(){
            box2.style.backgroundColor = "blue";
        });

        box3.addEventListener("dblclick", function(){
            box3.style.backgroundColor = "yellow";
        });

        box3.addEventListener("click", function(){
            box3.style.backgroundColor = "orange";
        });

        document.addEventListener("keydown", function(event){
            document.getElementById("demo").innerHTML = "You pressed the " +
event.key + " key.";

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    });

    document.addEventListener("keyup", function(event){
        document.getElementById("demo").innerHTML = "You released the " +
event.key + " key.";
    })
</script>
</body>
</html>

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<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
    <!-- We will discuss event handling for window/document events like load,
scroll, resize, unload, beforeunload, etc. -->

</head>
<body>

    <h1>Window Events</h1>
    <p>Scroll down to see the effect of the scroll event.</p>
    <p>Resize the browser window to see the effect of the resize event.</p>
    <p>Click on the browser window to see the effect of the click event.</p>
    <p>Close the browser window to see the effect of the beforeunload
event.</p>
    <p>Refresh the browser window to see the effect of the unload event.</p>

    <script>
        window.addEventListener("load", function(){
            alert("The page has loaded.");
        });

        window.addEventListener("scroll", function(){
            document.body.style.backgroundColor = "red";
        });

        window.addEventListener("resize", function(){
            document.body.style.backgroundColor = "blue";
        });

        window.addEventListener("click", function(){
            document.body.style.backgroundColor = "green";
        });
    </script>

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