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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>Scoped Variables</title>  </head>  <body>      <h1>Scope Lab for Var, Let and Const</h1>      </h1>      <script src="./scope\_lab.js"></script>  </body>  </html> | // Global scope  var globalVar = "I'm a global variable";  let globalLet = "I'm also global, but scoped with let";  const globalConst = "I'm a global constant";  {  // Block scope  var blockVar = "I'm a block-scoped var";  let blockLet = "I'm a block-scoped let";  const blockConst = "I'm a block-scoped const";  }  // Global scope  console.log(globalVar); // Output: "I'm a global variable"  console.log(globalLet); // Output: "I'm also global, but scoped with let"  console.log(globalConst); // Output: "I'm a global constant"  console.log(blockVar); // Output: "I'm a block-scoped var"  //console.log(blockLet); // Output: "I'm a block-scoped let"  //console.log(blockConst); // Output: "I'm a block-scoped const"  function show(){  var functionVar = "I'm a block-scoped var";  let functionLet = "I'm a block-scoped let";  const functionConst = "I'm a block-scoped const";  }  show();  console.log(functionVar); // Throws ReferenceError  console.log(functionLet); // Throws ReferenceError  console.log(functionConst); // Throws ReferenceError |
| <!DOCTYPE html>  <html lang="en">  <head>      <meta charset="UTF-8">      <meta name="viewport" content="width=device-width, initial-scale=1.0">      <title>Control Flow</title>  </head>  <body>          <h1>Control Flow and Conditional Statements</h1>      <script src="./control\_flow.js"></script>  </body>  </html> | let userRole = "admin";  let accessLevel;  if (userRole === "admin") {      accessLevel = "Full access granted";  } else if (userRole === "manager") {      accessLevel = "Limited access granted";  } else {      accessLevel = "No access granted";  }  console.log("Access Level:", accessLevel);  let isLoggedIn = true;  let userMessage;  if (isLoggedIn) {      if (userRole === "admin") {          userMessage = "Welcome, Admin!";      } else {          userMessage = "Welcome, User!";      }  } else {      userMessage = "Please log in to access the system.";  }  console.log("Message :", userMessage);  let userType = "subscriber";  let userCategory;  switch (userType) {      case "admin":          userCategory = "Administrator";          break;      case "manager":          userCategory = "Manager";          break;      case "subscriber":          userCategory = "Subscriber";          break;      default:          userCategory = "Unknown";  }  console.log("User Category:", userCategory);  let isAuthenticated = true;  let authenticationStatus = isAuthenticated ? "Authenticated" : "Not authenticated";  console.log("Authentication Status:", authenticationStatus); |
| <!DOCTYPE html>  <html>  <head>    <title>Rectangle Area Calculator</title>  </head>  <body>    <h1>Rectangle Area Calculator</h1>    <label for="length">Enter the length: </label>    <input type="number" id="length"><br><br>    <label for="width">Enter the width: </label>    <input type="number" id="width"><br><br>    <button onclick="calculateArea()">Calculate Area</button><br><br>    <p id="result"></p>  <script src="./calculateArea.js"></script>  </body>  </html> | let length;  let width;  function calculateArea() {   length = parseFloat(document.getElementById('length').value);   width = parseFloat(document.getElementById('width').value);     let area = length \* width;   document.getElementById('result').innerText = `The area of the rectangle is: ${area}`;  } |
| **Without addEventListener:**   1. // <button id="myButton" onclick="handleButtonClick()">Click me</button> 2. <script> 3. function handleButtonClick() { 4. console.log('Button clicked!'); 5. } 6. </script> | **With addEventListener:**   1. // <button id="myButton">Click me</button> 2. <script> 3. // Get the button element 4. const button = document.getElementById('myButton'); 5. // Add event listener for 'click' event 6. button.addEventListener('click', handleButtonClick); 7. // Function to handle button click 8. function handleButtonClick() { 9. console.log('Button clicked!'); 10. } 11. </script> |
| 1. // <button id="clickButton">Click Me!</button> 2. <script> 3. document.getElementById('clickButton').addEventListener('click', function() { 4. alert('Button clicked!'); 5. }); 6. </script> | MouseOver:   1. // <div id="moveArea" style="width: 200px; height: 200px; background-color: lightcoral;"></div> 2. <script> 3. const moveArea = document.getElementById('moveArea'); 4. moveArea.addEventListener('mousemove', function(event) { 5. console.log(`Mouse coordinates - X: ${event.clientX}, Y: ${event.clientY}`); 6. }); 7. </script> 8. > |
| Keyup and Keydown:   1. // input type="text" id="keyInput"> 2. <script> 3. const keyInput = document.getElementById('keyInput'); 4. keyInput.addEventListener('keydown', function() { 5. console.log('Key pressed down!'); 6. }); 7. keyInput.addEventListener('keyup', function() { 8. console.log('Key released!'); 9. }); 10. </script> | Keypress:   1. **// input type="text" id="pressInput">** 2. **<script>** 3. **const pressInput = document.getElementById('pressInput');** 4. **pressInput.addEventListener('keypress', function() {** 5. **console.log('Key pressed!');** 6. **});** 7. **</script>** | |
| Submit event:   1. // form id="myForm"> 2. <input type="text" id="textInput"> 3. <input type="submit" value="Submit"> 4. </form> 5. <script> 6. document.getElementById('myForm').addEventListener('submit', function(event) { 7. event.preventDefault(); // Prevents the default form submission behavior 8. console.log('Form submitted!'); 9. }); 10. </script> | Focus event:   1. // <input type="text" id="textInput" placeholder="Click here"> 2. <script> 3. const textInput = document.getElementById('textInput'); 4. textInput.addEventListener('focus', function() { 5. console.log('Input focused'); 6. }); 7. textInput.addEventListener('blur', function() { 8. console.log('Input blurred'); 9. }); 10. </script> | |
| Load event:   1. // <script> 2. <script> 3. window.addEventListener('load', function() { 4. console.log('Page and all resources loaded'); 5. }); 6. </script> | Resize event:   1. // <script> 2. window.addEventListener('resize', function() { 3. console.log('Window resized'); 4. }); 5. </script> | |
| Scroll event:   1. // <div style="height: 2000px; background-color: lightblue;"> 2. Scroll down 3. </div> 4. <script> 5. window.addEventListener('scroll', function() { 6. console.log('Document scrolled'); 7. }); 8. </script> |  | |

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