

```
1 <!DOCTYPE html >
2 <html >
3
4 <head>
5   <meta charset="utf-8" >
6
7   <!-- the text that goes in the browser tab -->
8   <title>Lesson 16 JavaScript Control Structures</title>
9
10  <!--
11  File:   \\cssd.local\d\dropboxes\Website Development I\STobiasson140048\
12  Lesson16JavaScriptControlStructures2022-11-29.html
13  maintained by {Shane Tobiasson}
14  updated by {ST} on {11/29/22} at {9:15AM}
15  -->
16
17  <!-- embedded style sheet -->
18  <style>
19    tr.line0 { /*top line*/
20      background-color: black;
21      color: white;
22      font-weight: bold;
23    }
24
25    td.column0 { /*left side column*/
26      background-color: black;
27      color: white;
28      font-weight: bold;
29    }
30
31    td.active { /*cells activated by the function*/
32      background-color: red;
33    }
34
35    td:hover { /*what happens when the mouse hovers over a cell*/
36      background-color: green;
37      color: white;
38    }
39
40    table, td { /*general settings for the table*/
41      border: 1px solid black;
42      border-collapse: collapse;
43      padding: 3px;
44      min-height: 20px;
45      min-width: 30px;
46      text-align: center;
47    }
48
49  </style>
50
51  <!--function declarations-->
52  <script>
53
54    function activateCells(classes){
55      let activeCells = [];
56      console.log( classes ); // added by JMH
57    };
58
59  </script>
60
61
```

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62 <!-- set the icon to use in the browser tab -->
63 <link href="images/01dManInTheMountain_16x16.ico" rel="icon" type="image/x-icon">
64 </head>
65
66 <body>
67
68 <!-- a JavaScript script -->
69 <script>
70     "use strict";
71
72     // STEP 3
73     // writes 0 1 2 3 4 5 6 7 8 9
74     //for (let k = 0; k < 10; k++) {
75     //    document.writeln(k + " ");
76     //} ;
77
78     // STEP 4
79     // writes 0 10 20 30 40 50 60 70 80 90
80     //for (let k = 0; k < 10; k++) {
81     //    document.writeln(k * 10 + " ");
82     //} ;
83
84     // STEP 5 & 6
85     // writes 0 1 2 3 4 5 6 7 8 9 in table cells
86     //document.writeln("<table>");
87     //for (let k = 0; k < 10; k++) {
88     //    document.writeln("<td>" + k + "</td>");
89     //} ;
90     //document.writeln("</table>");
91
92     // STEP 7
93     /*// writes 0 1 2 3 4 5 6 7 8 9 in table cells
94     document.writeln("<table>");
95     // top level for loop controls table rows
96     for (let a = 0; a < 1; a++) {
97         document.writeln("<tr>");
98         // an if statement for the top left corner of the table
99         if (a == 0) {
100             document.writeln("<td>&nbsp;</td>");
101         }
102         // for loop that controls the cells in the row
103         for (let k = 0; k < 10; k++) {
104             document.writeln("<td>" + k + "</td>");
105         } ;
106         document.writeln("</tr>");
107     };
108     document.writeln("</table>"); */
109
110     // STEP 8
111     // writes a new table tag
112     document.writeln("<table>");
113     // top level for loop controls table rows
114     for (let a = 0; a < 17; a++) {
115         document.writeln("<tr class='line" + a + "'>"); // creates new table row element for
115         every iteration of for loop
116         if (a == 0) { // an if statement for the top row of the table
117             document.writeln("<td>&nbsp;</td>"); // blank cell in the top left corner
118             for (let k = 0; k < 16; k++) { // generates cells for the row
119                 document.writeln("<td>" + (k) + "</td>");
120             };
121         }

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122
123 // all other rows besides the top row
124 else {
125     document.writeln("<td class='column0'>" + (a - 1) + "</td>"); // left hand column
125     only
126     // for loop that controls the cells in the row
127     for (let k = 0; k < 16; k++) { // populates the cells in the row with classes for
127     line and column
128         let classes = "line" + a + " column" + (k + 1);
129         let id = "line" + a + "_column" + (k + 1);
130         //console.log(classes);
131         //console.log(id);
132         document.writeln("<td id='" + id + "' class='" + classes + "'>" + (k * (a - 1))
132         + "</td>");
133         //add an event listener to the table cell that was just created
134         // JMH commented out the following two statements
135         // document.getElementById(id).addEventListener("click",
135         activateCells(classes));
136         // console.log()
137         // JMH added the following statement based on the article "Passing
138         // Arguments to event Listeners in JavaScript"
139         document.getElementById(id).addEventListener(
140         "click", () => { activateCells(classes) });
141     };
142 };
143 document.writeln("</tr>"); // ends the current row
144 };
145 document.writeln("</table>"); // ends the table
146
147
148 </script>
149
150 </body>
151
152 </html >
```