

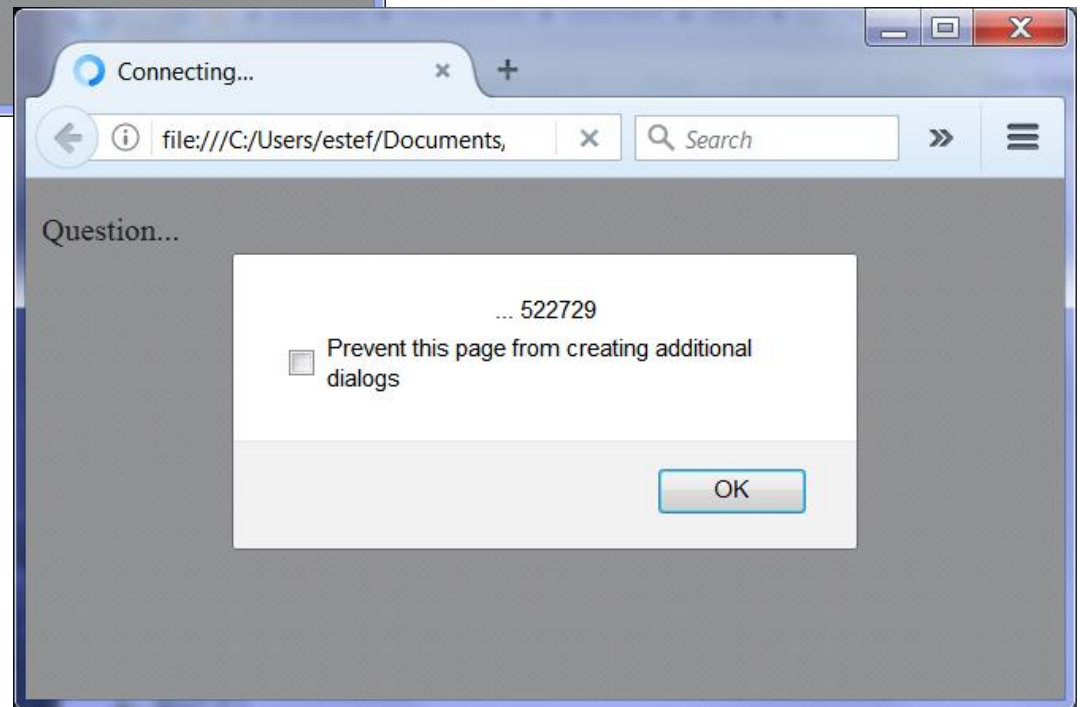
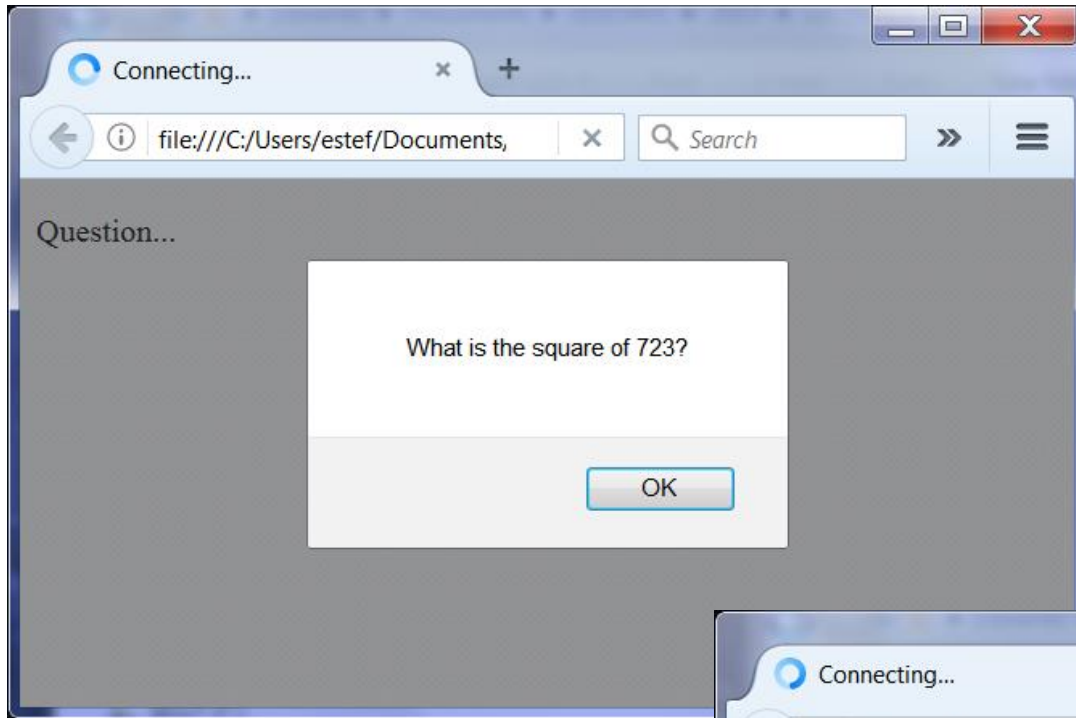
JavaScript Code Examples

<http://gaia.gge.unb.ca:8080/gge5403/labs/6/JS/> (VPN needed)

Emmanuel Stefanakis
estef@unb.ca

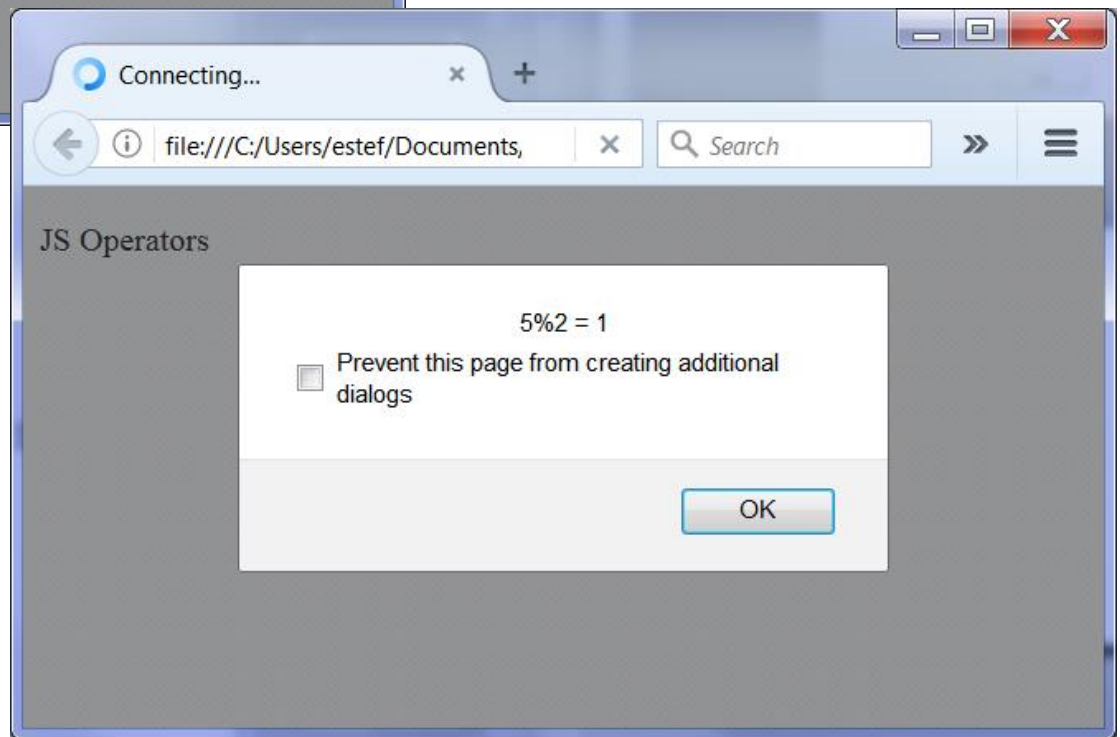
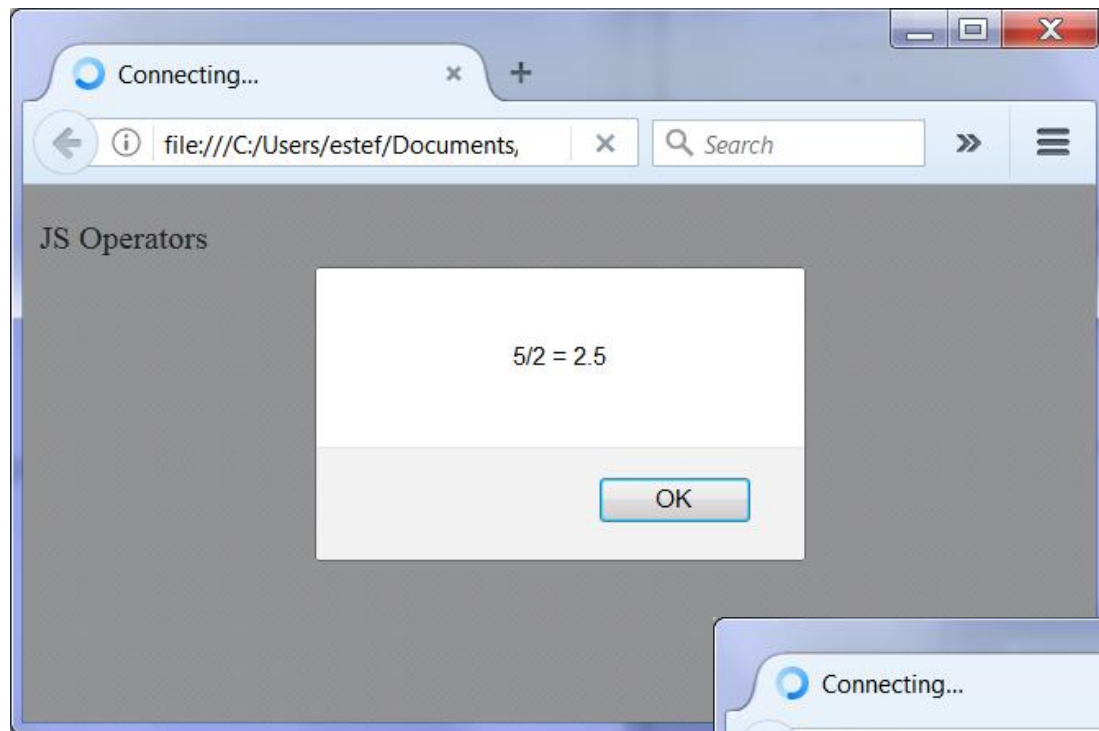
```
C:\Users\estef\Documents\GGE5401\2017\LECTURES\Week_8\JS\code_1.html - Notepad++ [Administrator]
File Edit Search View Encoding Language Settings Macro Run Plugins Window ?
code_1.html x
1 <!-------
2 Alert - variable - math operation
3 -->
4
5 <!DOCTYPE HTML>
6 <html>
7 <body>
8
9 <p>Question...</p>
10
11 <script>
12     alert('What is the square of 723?');
13     var a = 723*723;
14     alert('... '+a);
15 </script>
16
17 <p>Have a nice day.</p>
18
19 </body>
20 </html>

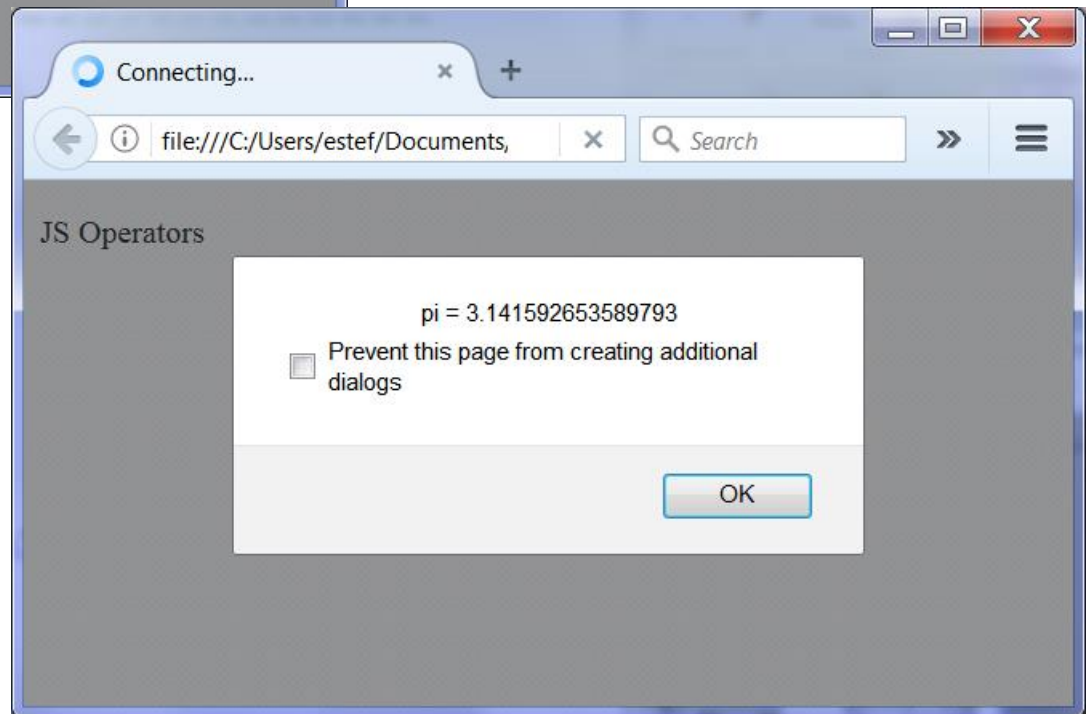
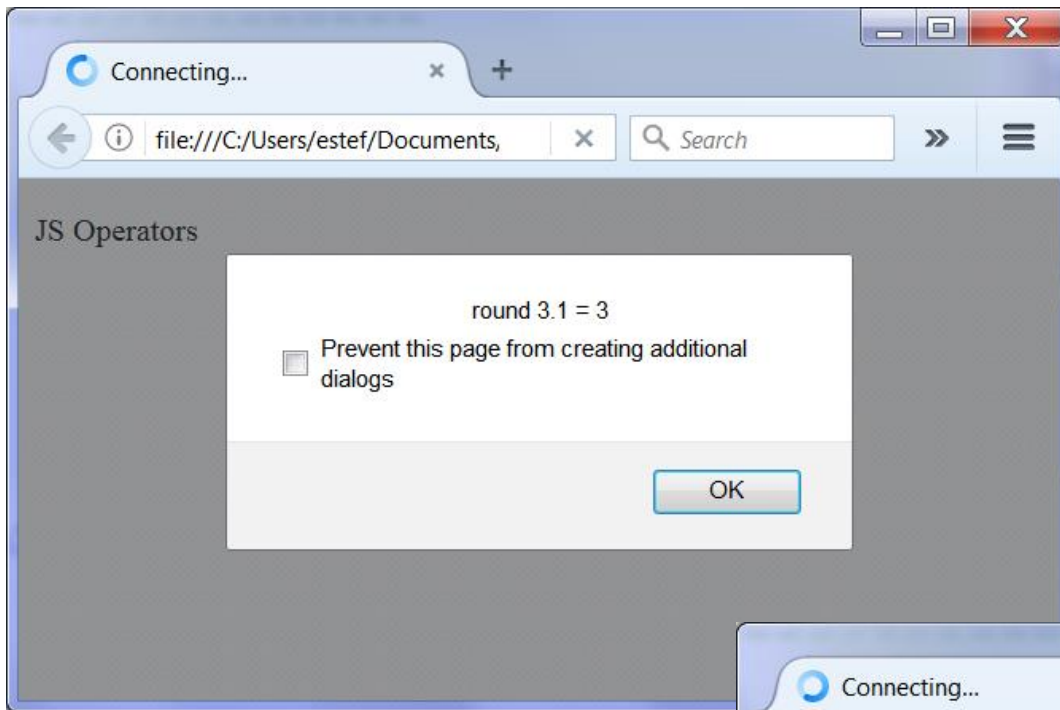
Hyper Text Markup Language file    length : 271    lines : 22    Ln : 11    Col : 11    Sel : 0 | 0    UNIX    ANSI as UTF-8    INS
```



```
C:\Users\estef\Documents\GGE5401\2017\LECTURES\Week_8\JS\code_2.html - Notepad++ [Administrator]
File Edit Search View Encoding Language Settings Macro Run Plugins Window ?
code_2.html x
1 <!-- -----
2 Operators
3 -->
4
5 <!DOCTYPE HTML>
6 <html>
7 <body>
8
9 <p>JS Operators</p>
10
11 <script>
12     var i;
13     alert("5/2 = "+ 5/2 );
14     alert("5%2 = "+ 5%2 );
15     alert("round 3.1 = " + Math.round(3.1));
16     alert("pi = " + Math.PI);
17
18     i = 5;
19     alert("i=5; i++ = " + i++);
20     alert("after... i = " + i);
```

Hyper Text Markup Language file length : 580 lines : 37 Ln : 4 Col : 1 Sel : 0 | 0 UNIX ANSI as UTF-8 INS

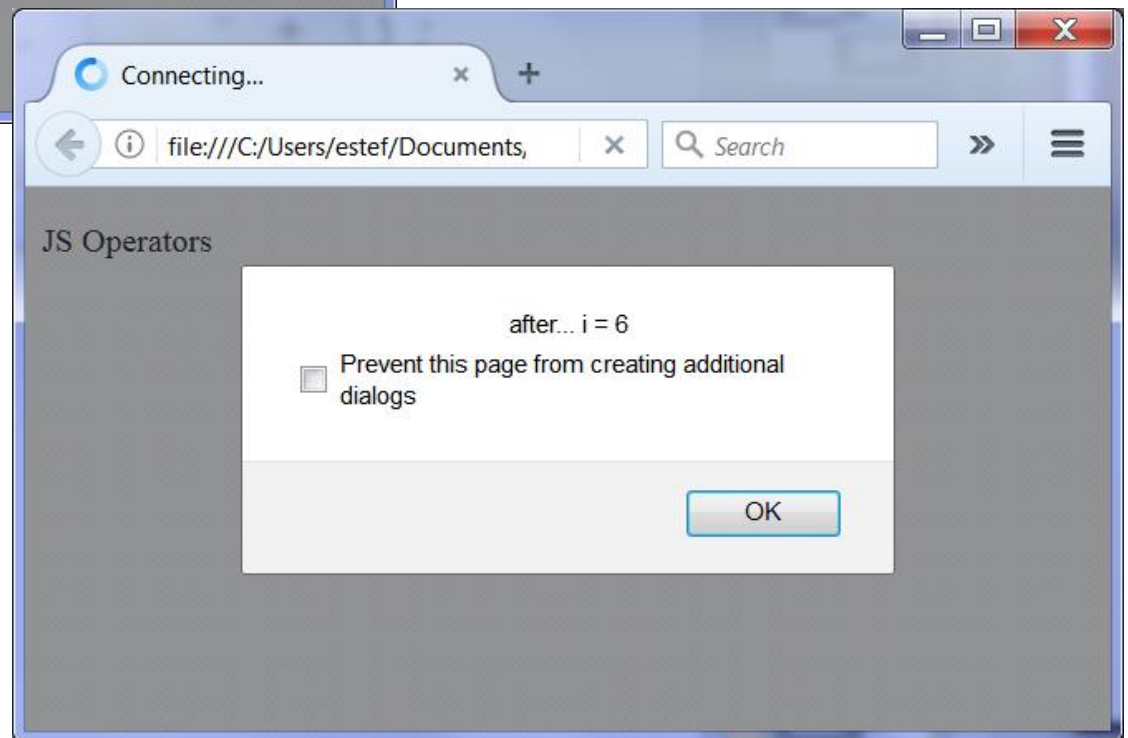
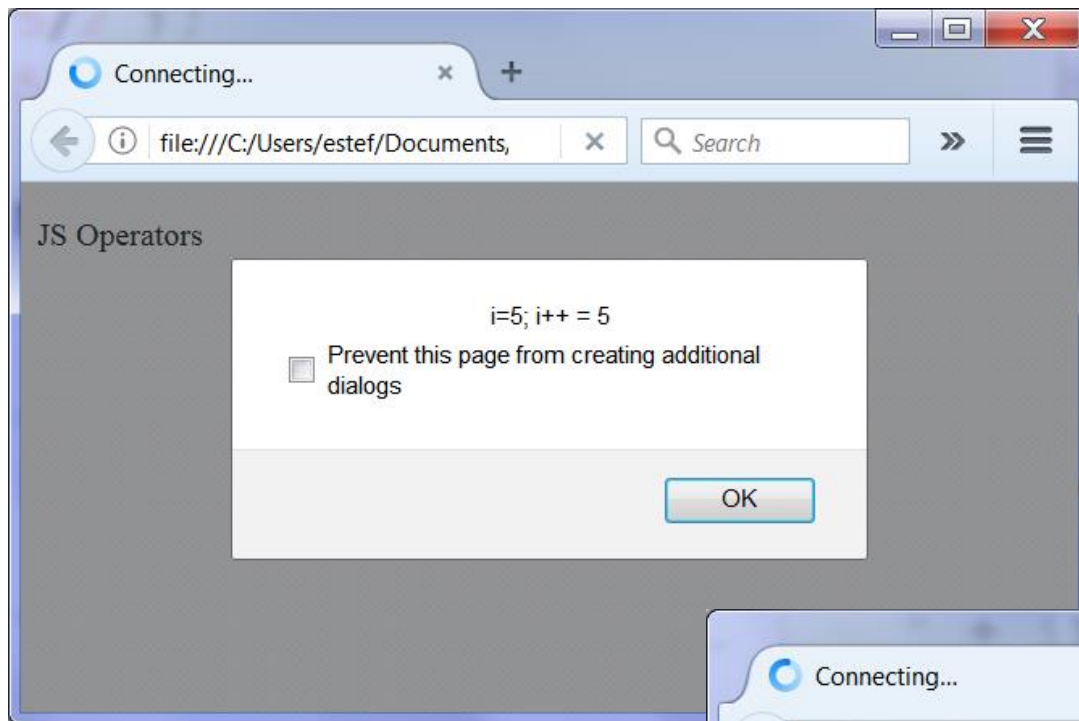


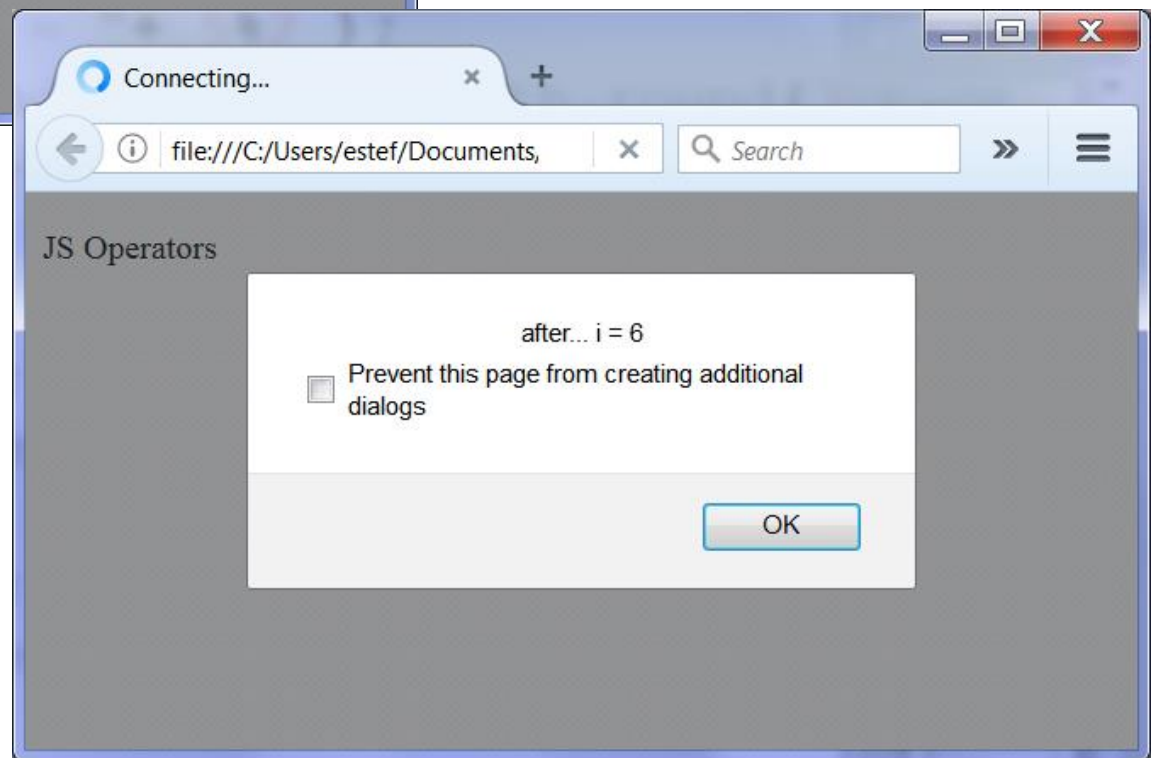
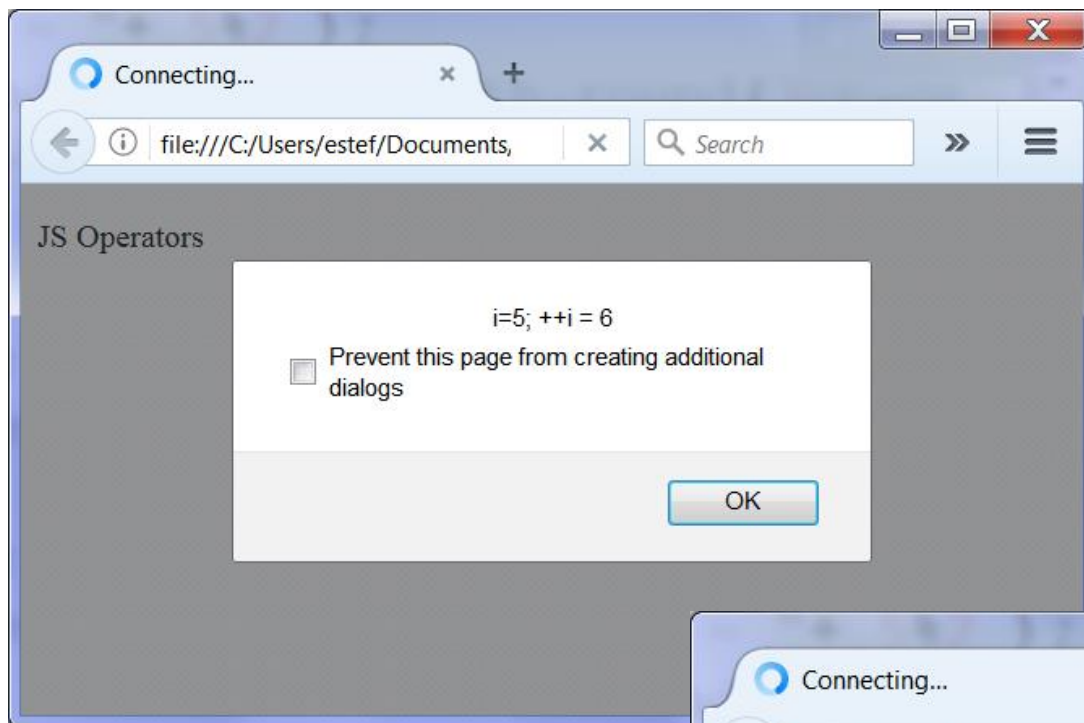


```
C:\Users\estef\Documents\GGE5401\2017\LECTURES\Week_8\JS\code_2.html - Notepad++ [Administrator]
File Edit Search View Encoding Language Settings Macro Run Plugins Window ?
code_2.html x

17
18     i = 5;
19     alert("i=5; i++ = " + i++);
20     alert("after... i = " + i);
21     i = 5;
22     alert("i=5; ++i = " + ++i);
23     alert("after... i = " + i);
24
25     alert("parse " + parseInt('0xFF'))
26     alert("parse " + parseFloat('13.3'))
27     alert("parse " + parseInt('13.3'))
28     alert("parse " + parseInt('a'))
29
30 </script>
31
32 <p>Have a nice day.</p>
33
34 </body>
35 </html>
36

Hyper Text Markup Language file    length : 580   lines : 37    Ln : 8   Col : 1   Sel : 0 | 0    UNIX    ANSI as UTF-8    INS
```

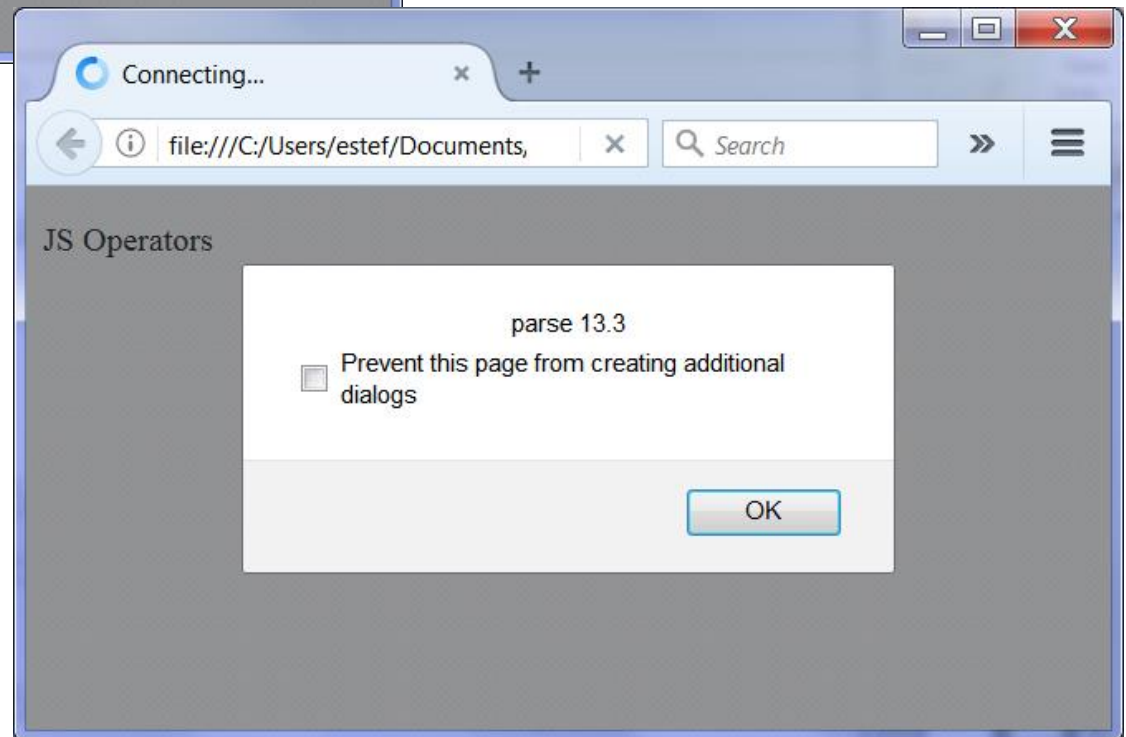
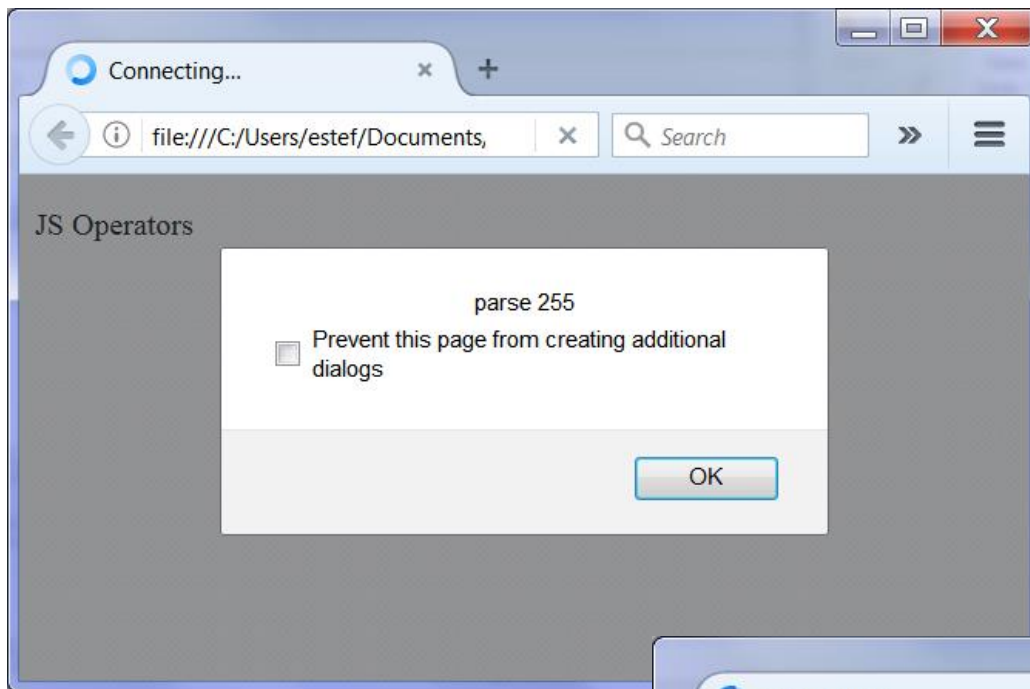


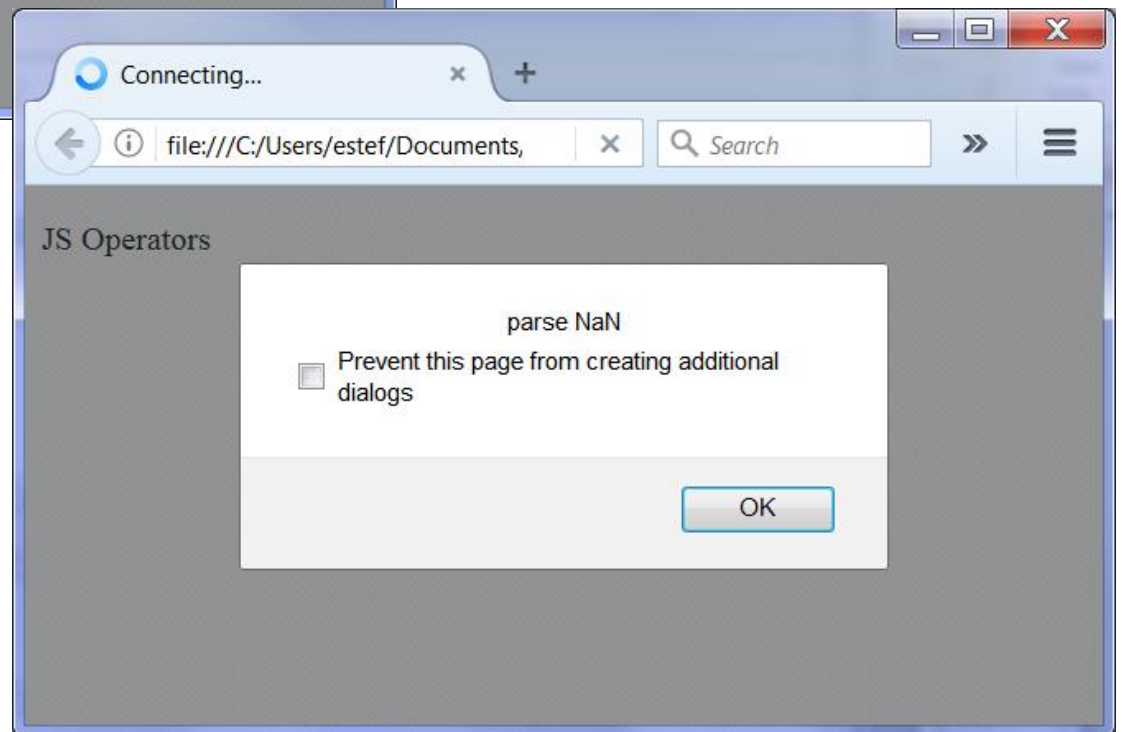
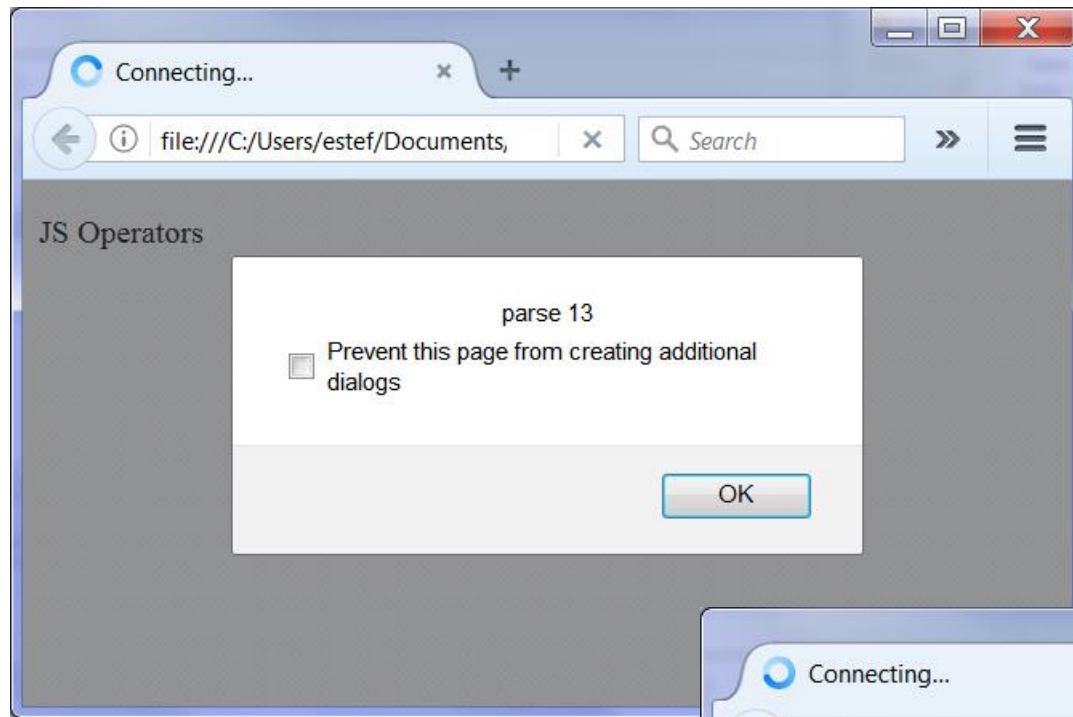


```
C:\Users\estef\Documents\GGE5401\2017\LECTURES\Week_8\JS\code_2.html - Notepad++ [Administrator]
File Edit Search View Encoding Language Settings Macro Run Plugins Window ?
code_2.html x

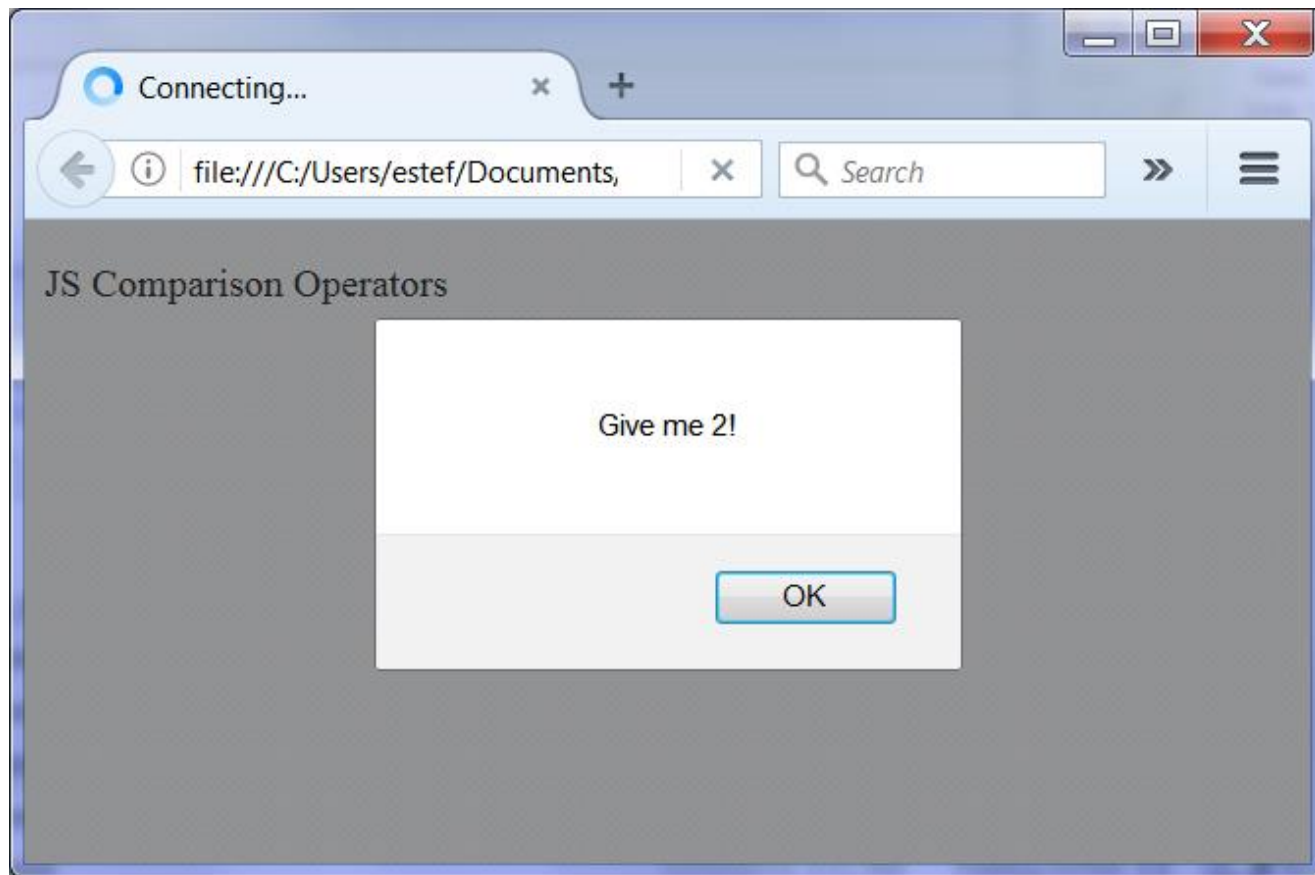
17
18     i = 5;
19     alert("i=5; i++ = " + i++);
20     alert("after... i = " + i);
21     i = 5;
22     alert("i=5; ++i = " + ++i);
23     alert("after... i = " + i);
24
25     alert("parse " + parseInt('0xFF'))
26     alert("parse " + parseFloat('13.3'))
27     alert("parse " + parseInt('13.3'))
28     alert("parse " + parseInt('a'))
29
30 </script>
31
32 <p>Have a nice day.</p>
33
34 </body>
35 </html>
36

Hyper Text Markup Language file    length : 580    lines : 37    Ln : 8    Col : 1    Sel : 0 | 0    UNIX    ANSI as UTF-8    INS
```



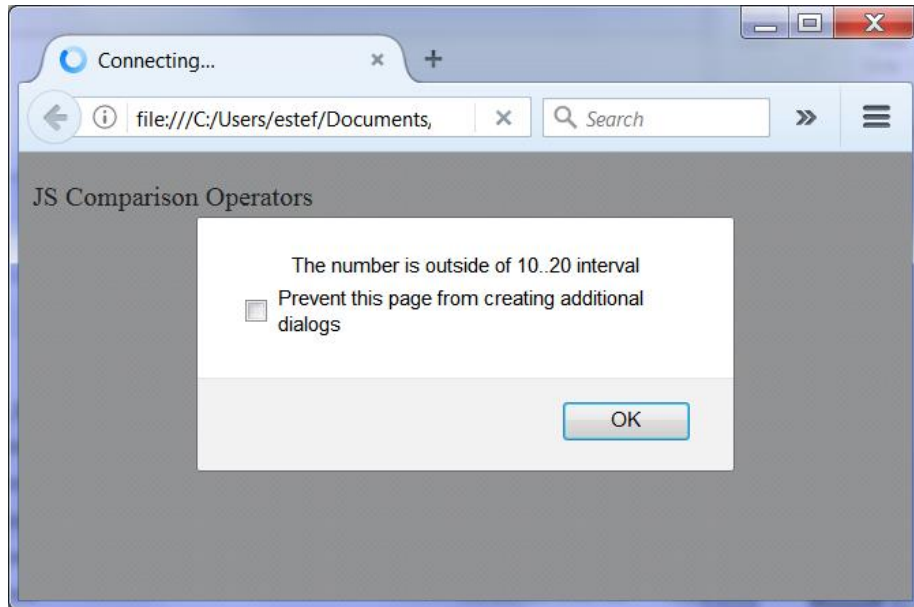
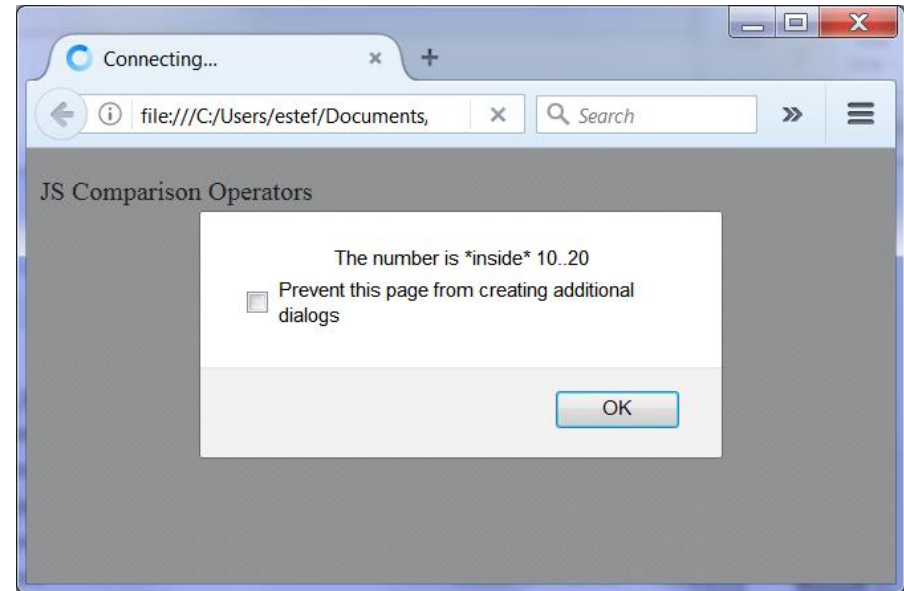
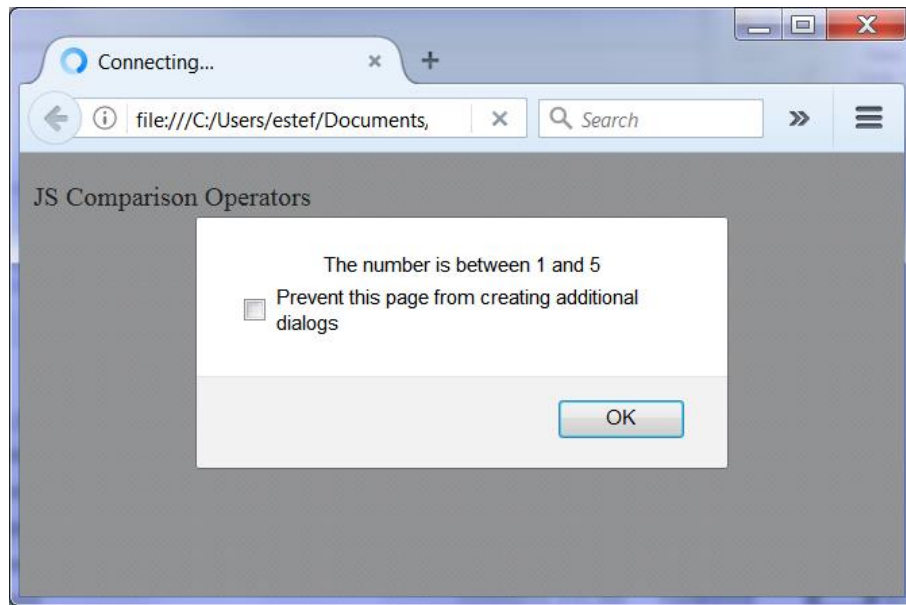


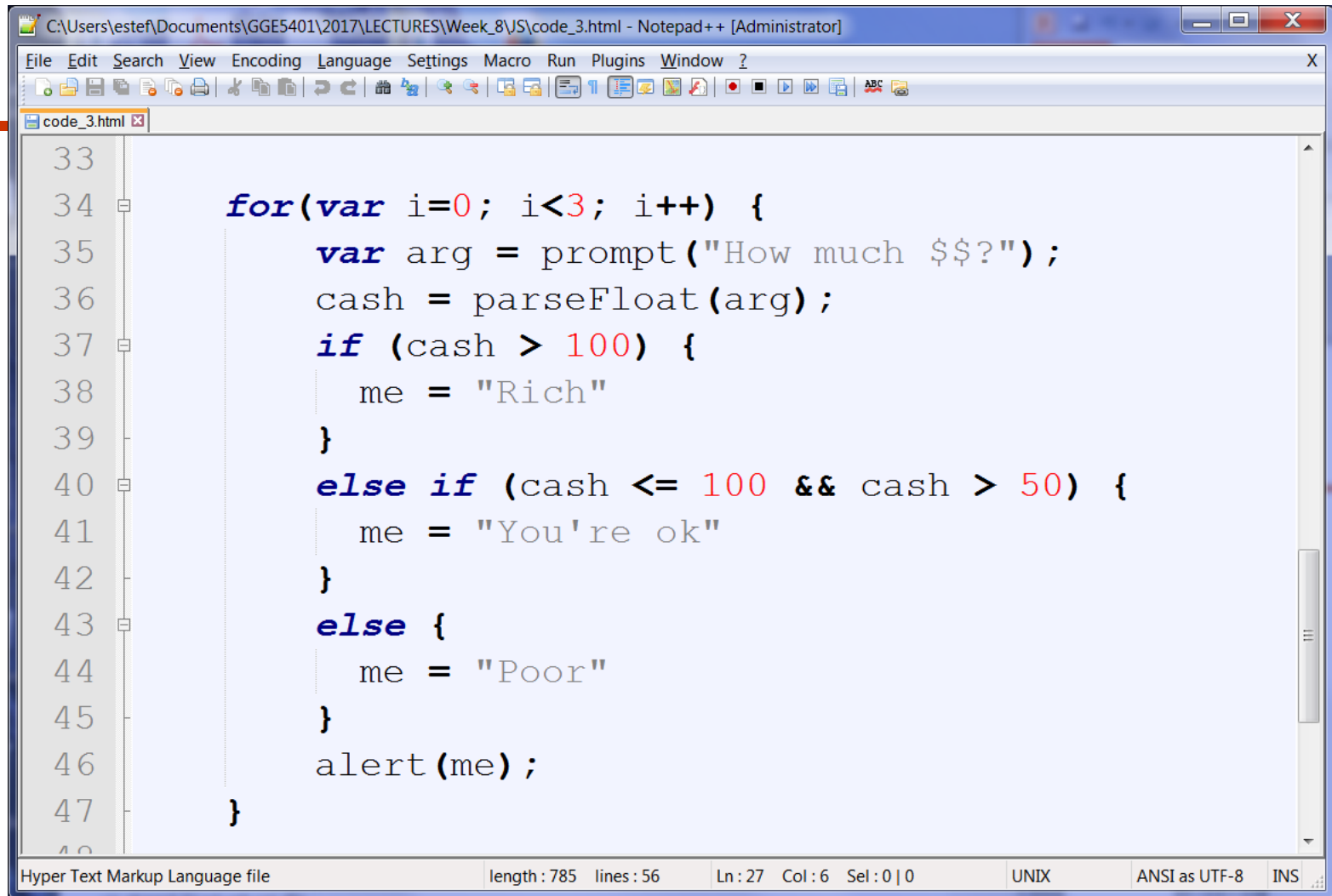
```
C:\Users\vestef\Documents\GGE5401\2017\LECTURES\Week_8\JS\code_3.html - Notepad++ [Administrator]
File Edit Search View Encoding Language Settings Macro Run Plugins Window ?
code_3.html x
1 <!-- -----
2 Comparison Operators
3 -->
4
5 <!DOCTYPE HTML>
6 <html>
7 <body>
8
9 <p>JS Comparison Operators</p>
10
11 <script>
12     var price = 99;
13     if (price > 100) {
14         alert('Expensive!')
15     } else {
16         alert('Give me 2!')
17     }
18
Hyper Text Markup Language file    length : 785    lines : 56    Ln : 1    Col : 1    Sel : 0 | 0    UNIX    ANSI as UTF-8    INS
```



```
19     var x = 3
20     if (x>=1 && x<=5) {
21         alert('The number is between 1 and 5')
22     }
23
24     var x = 3
25     if (x<10 || x>20) {
26         alert('The number is outside of 10..20
27         interval')
28     }
29
30     var x = 15
31     if ( !(x<10 || x>20) ) {
32         alert('The number is *inside* 10..20')
33     }
```

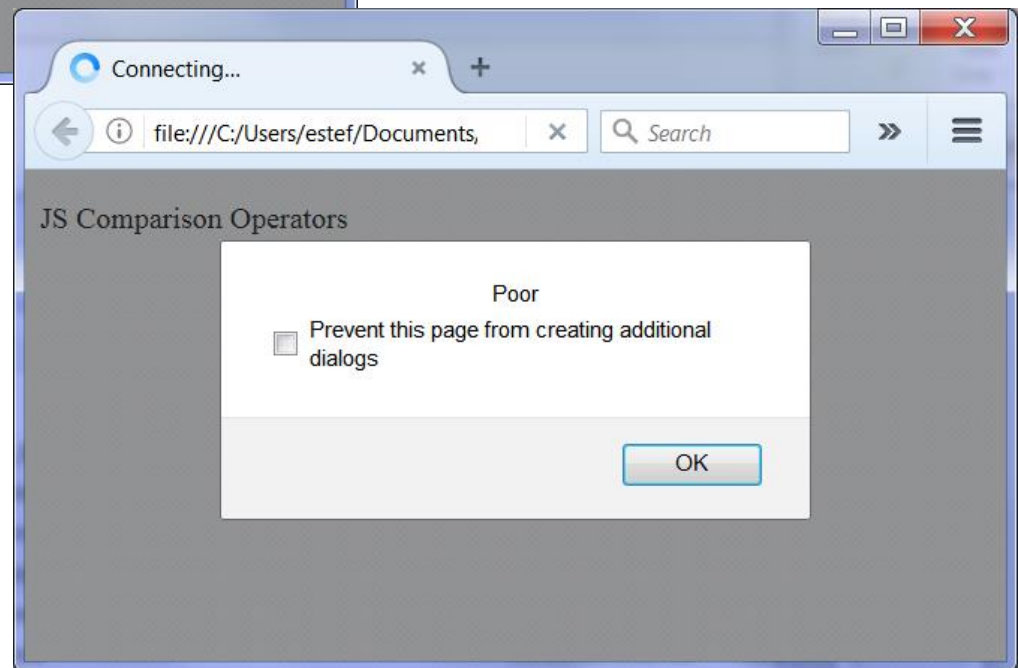
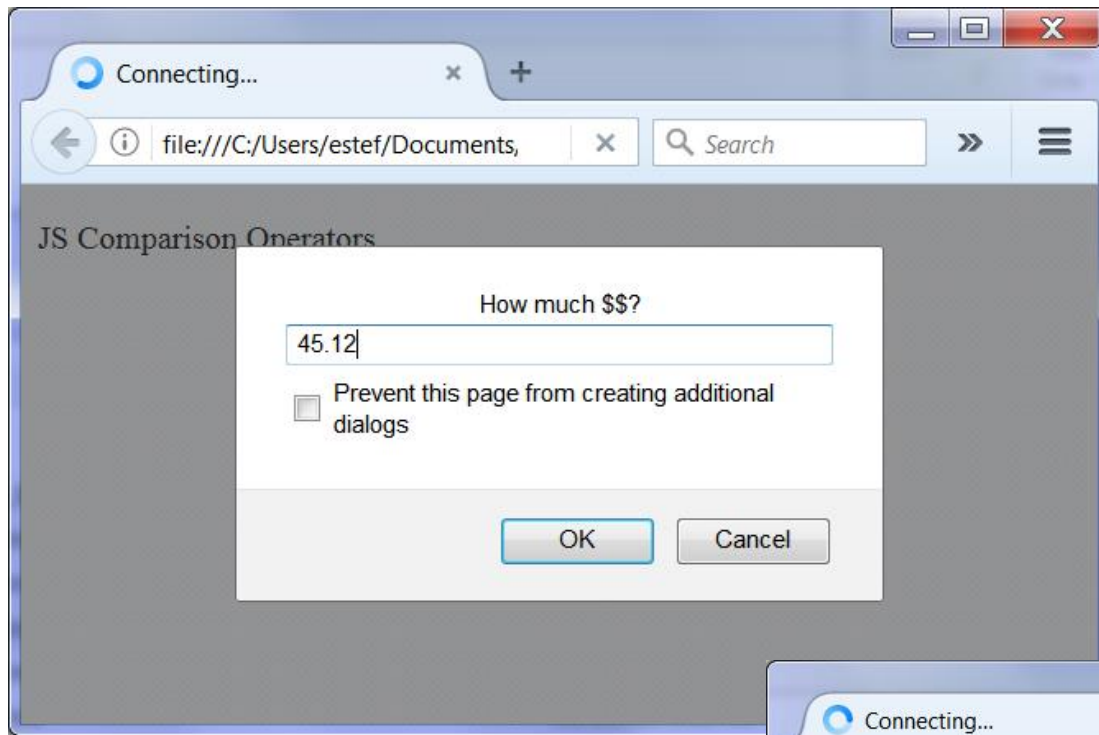
Hyper Text Markup Language file length : 785 lines : 56 Ln : 14 Col : 26 Sel : 0 | 0 UNIX ANSI as UTF-8 INS





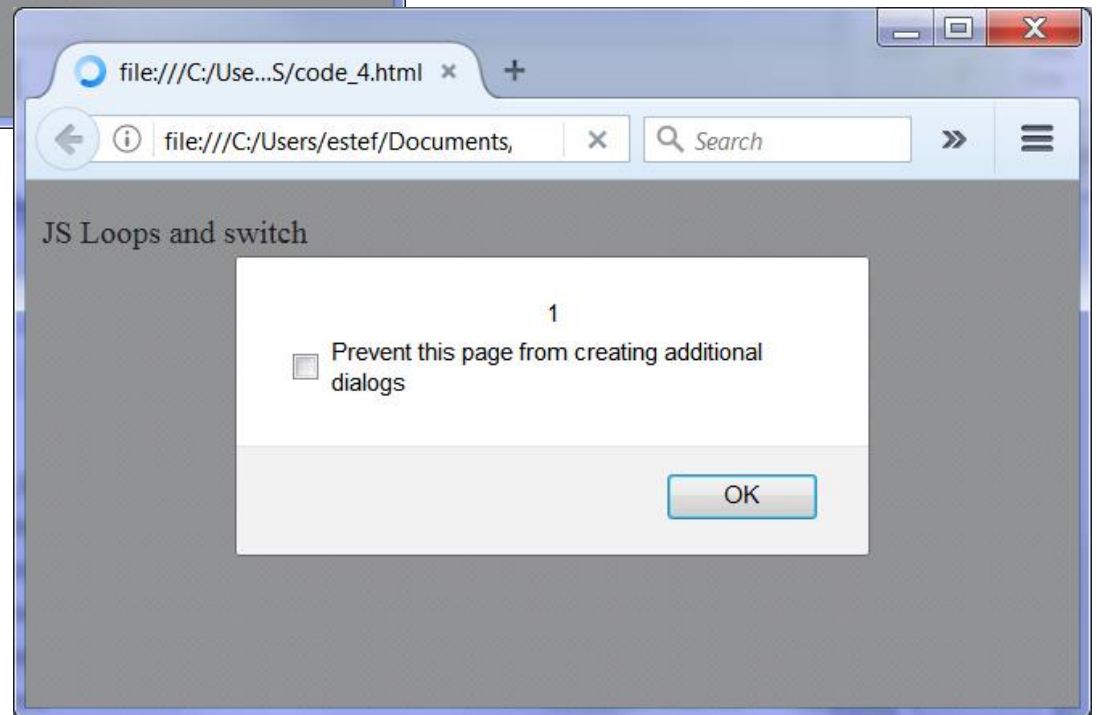
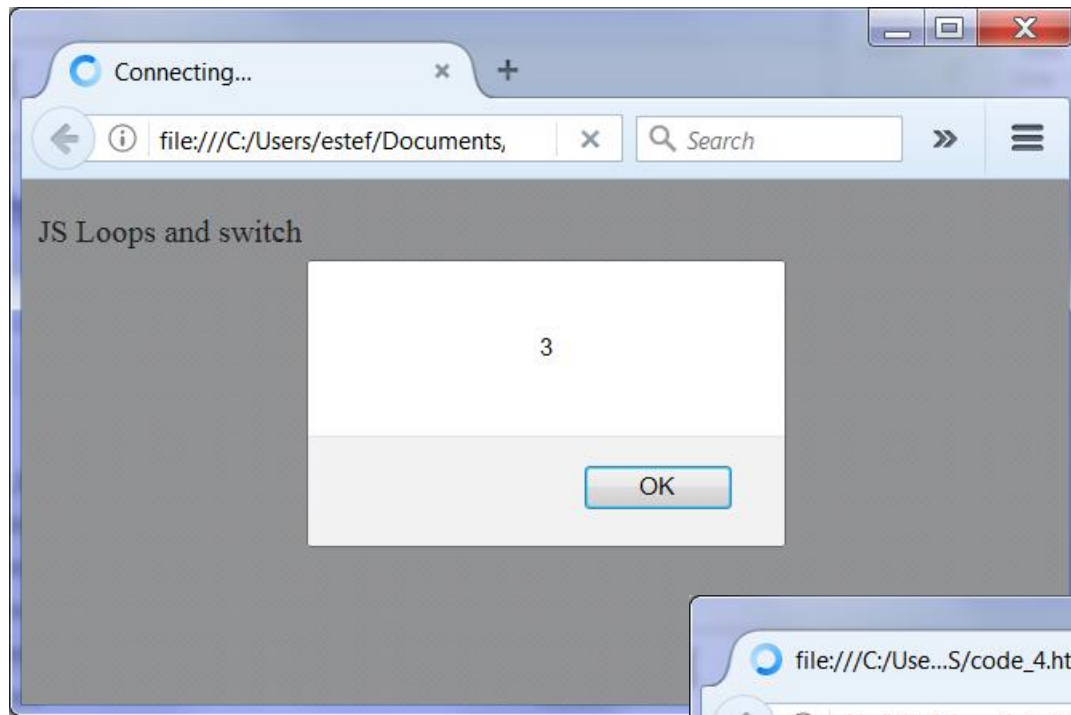
```
33  
34     for(var i=0; i<3; i++) {  
35         var arg = prompt("How much $$?");  
36         cash = parseFloat(arg);  
37         if (cash > 100) {  
38             me = "Rich"  
39         }  
40         else if (cash <= 100 && cash > 50) {  
41             me = "You're ok"  
42         }  
43         else {  
44             me = "Poor"  
45         }  
46         alert(me);  
47     }
```

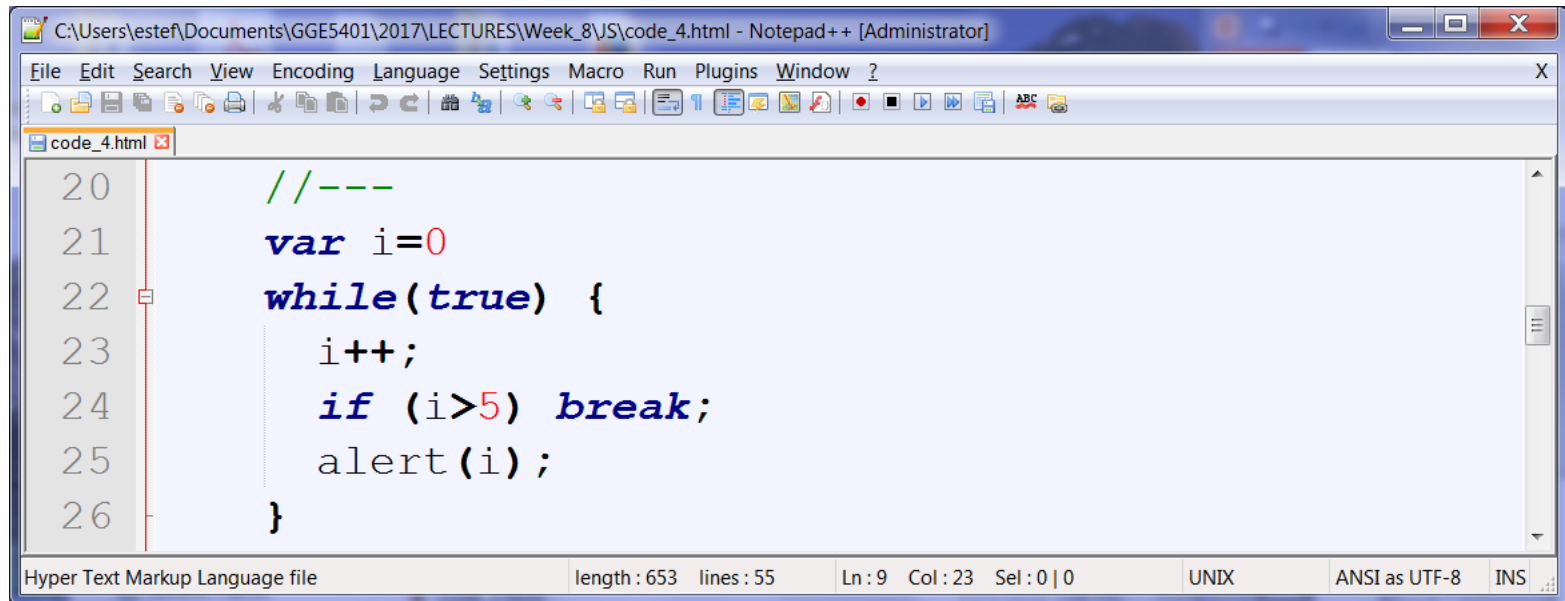
Hyper Text Markup Language file length : 785 lines : 56 Ln : 27 Col : 6 Sel : 0 | 0 UNIX ANSI as UTF-8 INS



```
C:\Users\yestef\Documents\GGE5401\2017\LECTURES\Week_8\JS\code_4.html - Notepad++ [Administrator]
File Edit Search View Encoding Language Settings Macro Run Plugins Window ?
code_4.html
1 <!-------
2 Loops and switch
3 -->
4
5 <!DOCTYPE HTML>
6 <html>
7 <body>
8
9 <p>JS Loops and switch</p>
10
11 <script>
12     var i = 3
13     while(i) {
14         alert(i--)
15     }
16     //---
17     for(i=0;i<10;i++) {
18         alert(i)
19     }
20 }
```

Hyper Text Markup Language file length : 653 lines : 55 Ln : 1 Col : 1 Sel : 0 | 0 UNIX ANSI as UTF-8 INS

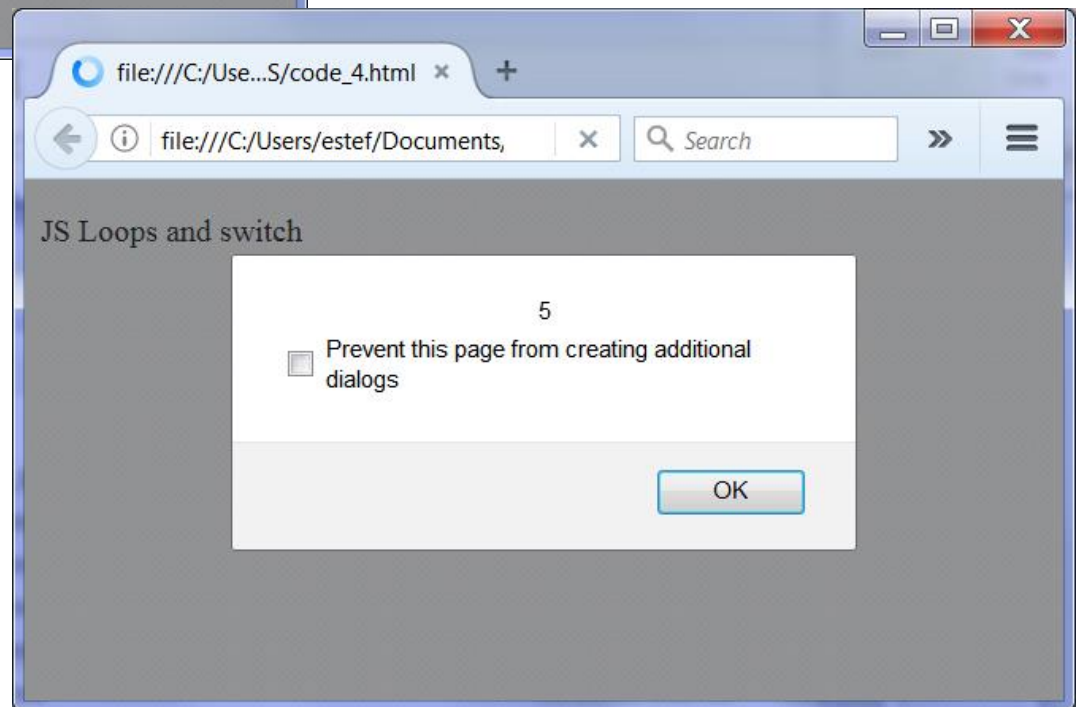
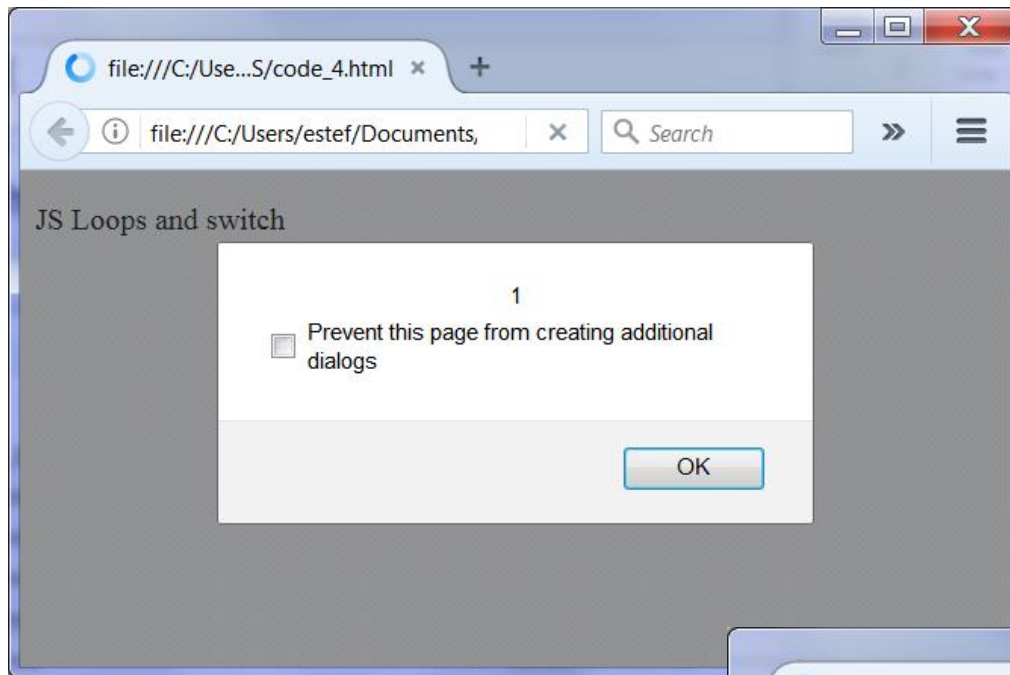




A screenshot of a Notepad++ window titled "C:\Users\estef\Documents\GGE5401\2017\LECTURES\Week_8\JS\code_4.html - Notepad++ [Administrator]". The window displays a JavaScript code snippet with line numbers 20 through 26 on the left margin. The code is as follows:

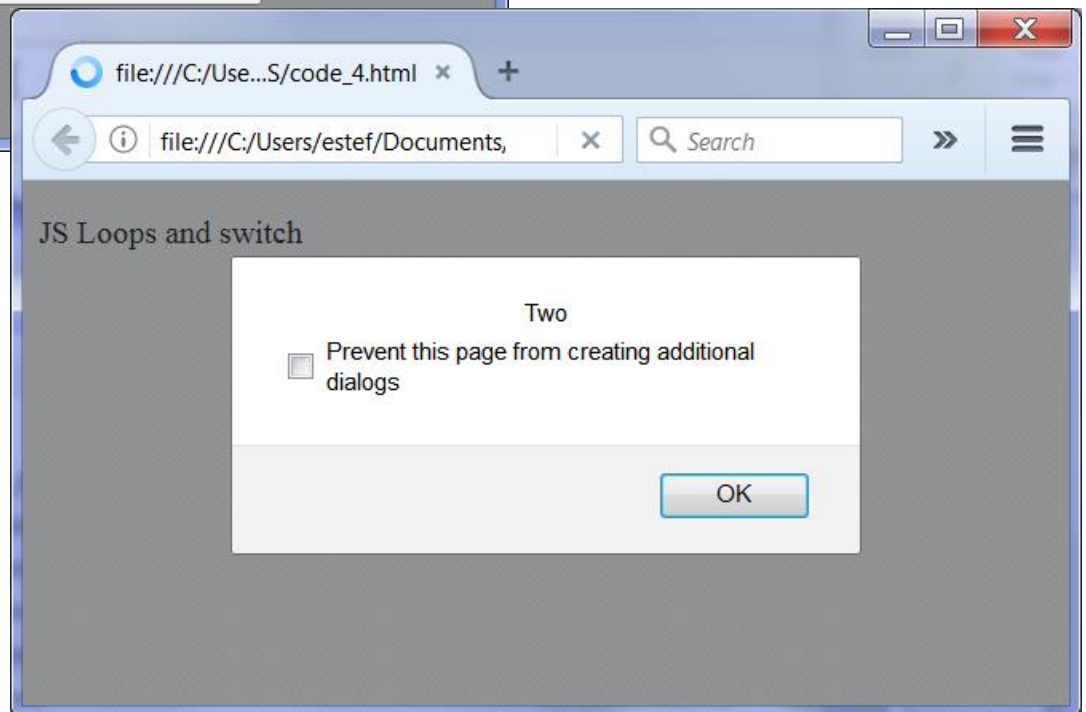
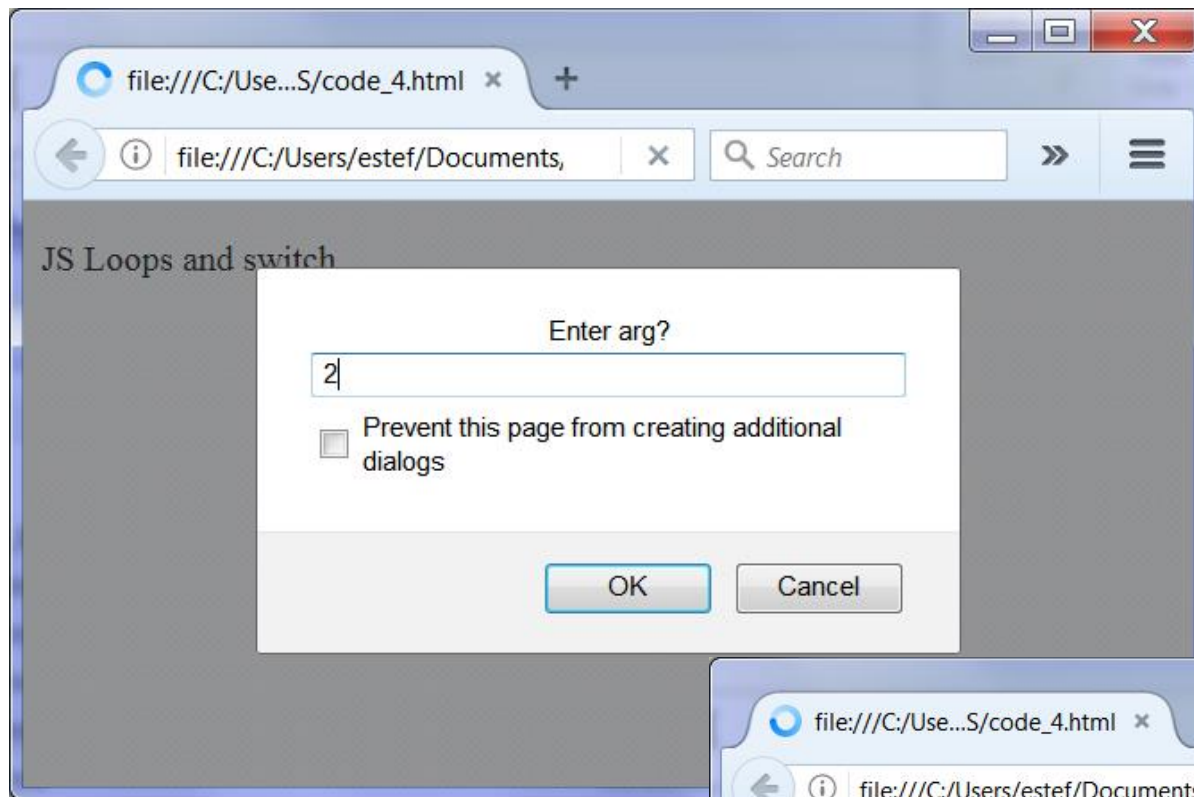
```
20      //---
21      var i=0
22      while(true) {
23          i++;
24          if (i>5) break;
25          alert(i);
26      }
```

The status bar at the bottom indicates "Hyper Text Markup Language file", "length : 653", "lines : 55", "Ln : 9", "Col : 23", "Sel : 0 | 0", "UNIX", "ANSI as UTF-8", and "INS".



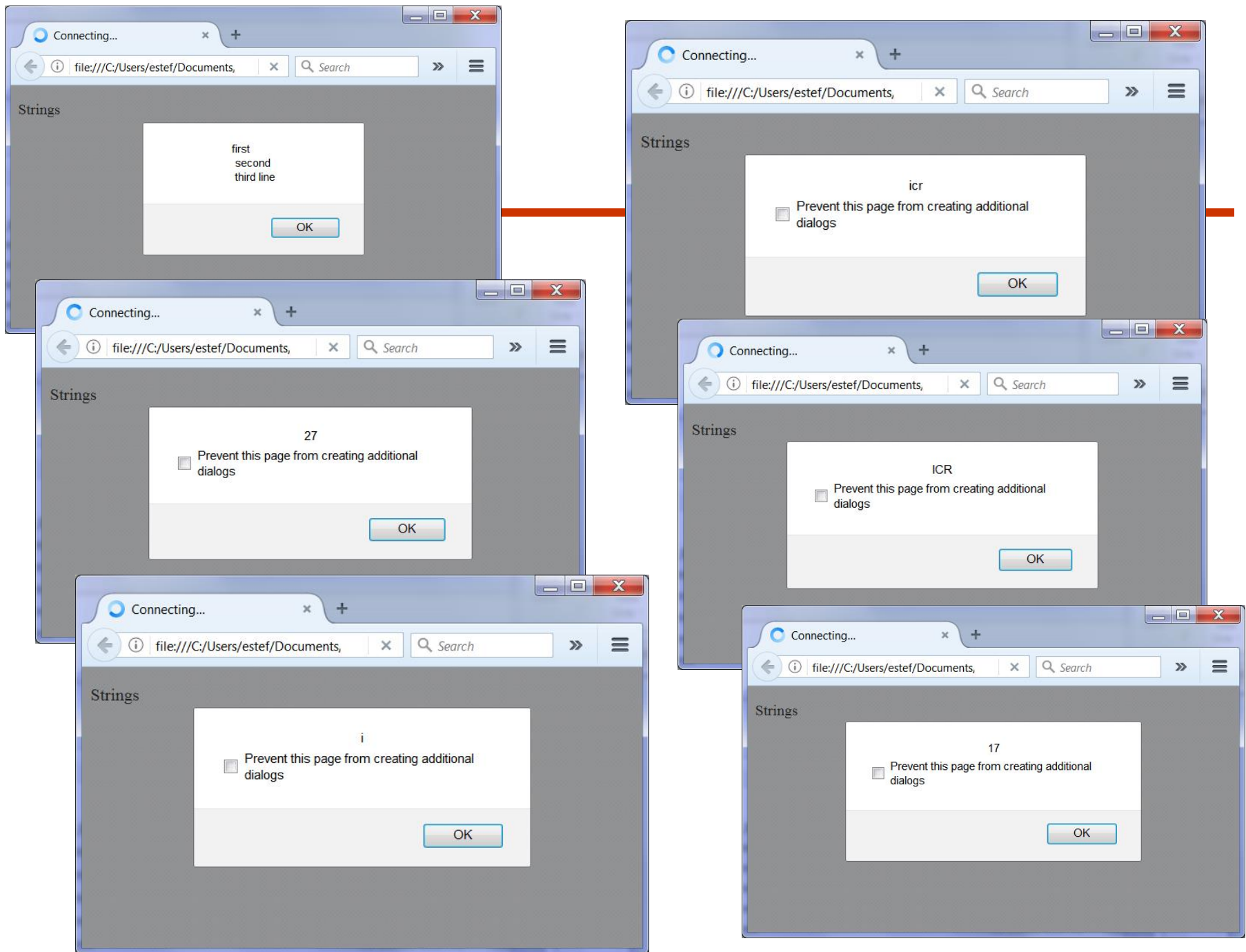
```
C:\Users\yestef\Documents\GGE5401\2017\LECTURES\Week_8\JS\code_4.html - Notepad++ [Administrator]
File Edit Search View Encoding Language Settings Macro Run Plugins Window ?
code_4.html
28 while(1) {
29     var arg = prompt("Enter arg?")
30     switch(arg) {
31         case '0':
32         case '1':
33             alert('One or zero')
34             break
35         case '2':
36             alert('Two')
37             break
38         case 3:
39             alert('Never happens')
40             break
41         case '$':
42             exit();
43             break
44         default:
45             alert('Unknown value: '+arg)
46     }
47 }
48 </script>
```

Hyper Text Markup Language file length : 653 lines : 55 Ln : 24 Col : 22 Sel : 0 | 0 UNIX ANSI as UTF-8 INS




```
C:\Users\yestef\Documents\GGE5401\2017\LECTURES\Week_8\JS\code_5.html - Notepad++ [Administrator]
File Edit Search View Encoding Language Settings Macro Run Plugins Window ?
code_5.html
7 <body>
8
9 <p>Strings</p>
10
11 <script>
12     var str = "first \n second \n third line"
13     alert(str) // alerts 3 lines
14     alert(str.length);
15     str.charAt(1);
16     alert(str[1]);
17
18     str1 = str.charAt(1) + str.charAt(10) +
19     str.charAt(20);
20     alert(str1)
21
22     alert(str1.toUpperCase())
23     alert(str.indexOf("third"))
24 </script>
25 <p>Have a nice day.</p>
26
```

Hyper Text Markup Language file length : 428 lines : 30 Ln : 1 Col : 1 Sel : 0 | 0 UNIX ANSI as UTF-8 INS



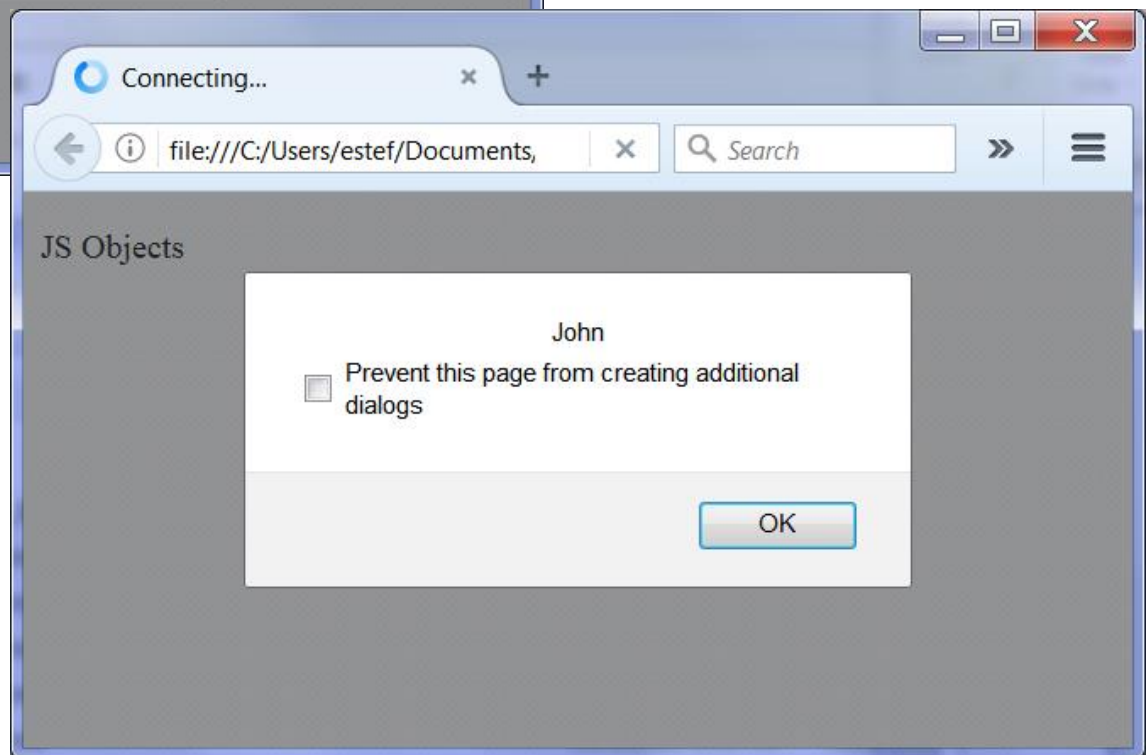
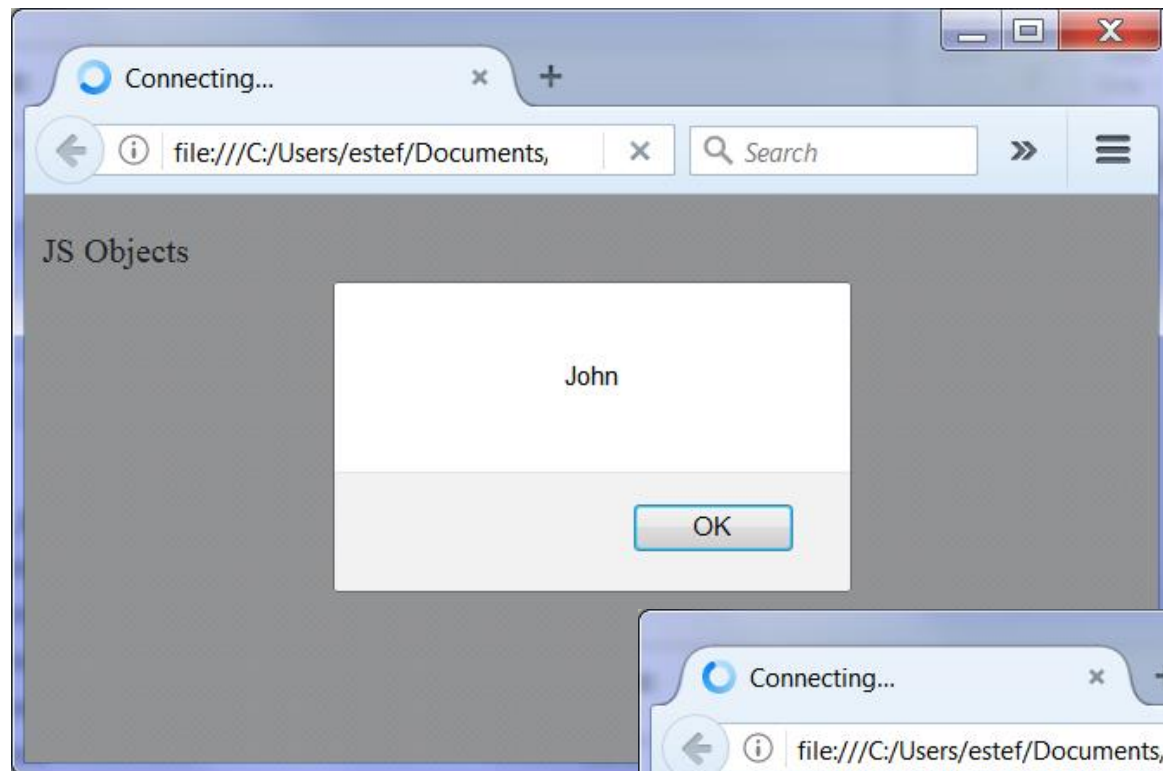
C:\Users\estef\Documents\GGE5401\2017\LECTURES\Week_8\JS\code_6.html - Notepad++ [Administrator]

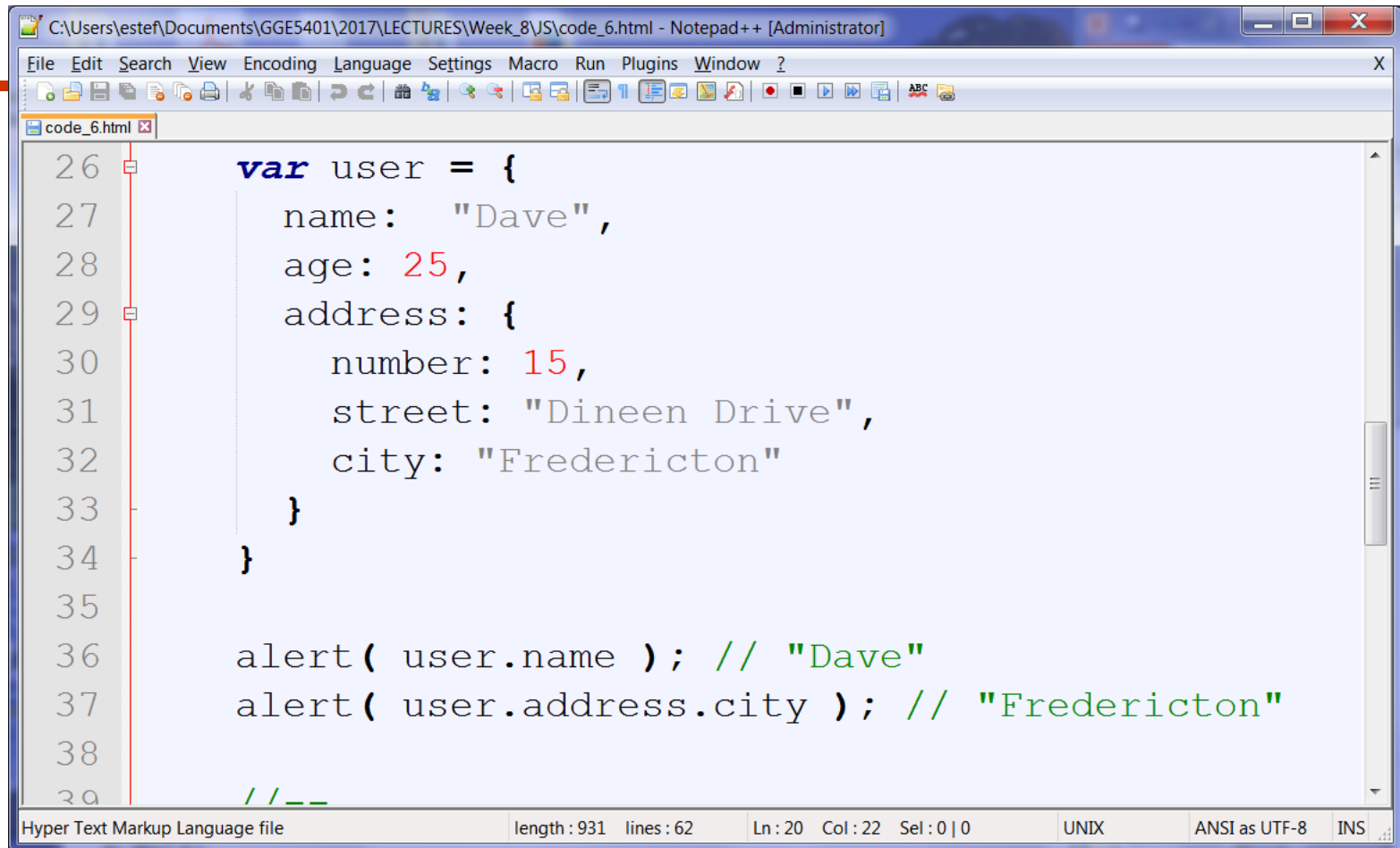
File Edit Search View Encoding Language Settings Macro Run Plugins Window ?

code_6.html

```
9      <p>JS Objects</p>
10
11     <script>
12
13         obj = new Object(); // create empty object
14         //var obj = { }      // does the same
15
16         obj.name = 'John';
17         alert(obj.name); // get value by key 'name'
18
19         var prop = 'name'; // returns same as
20         obj['name'], which is same as obj.name
21         alert(obj[prop]);
22
23         delete obj.name; // delete value by key 'name'
```

Hyper Text Markup Language file length : 931 lines : 62 Ln : 1 Col : 1 Sel : 0 | 0 UNIX ANSI as UTF-8 INS

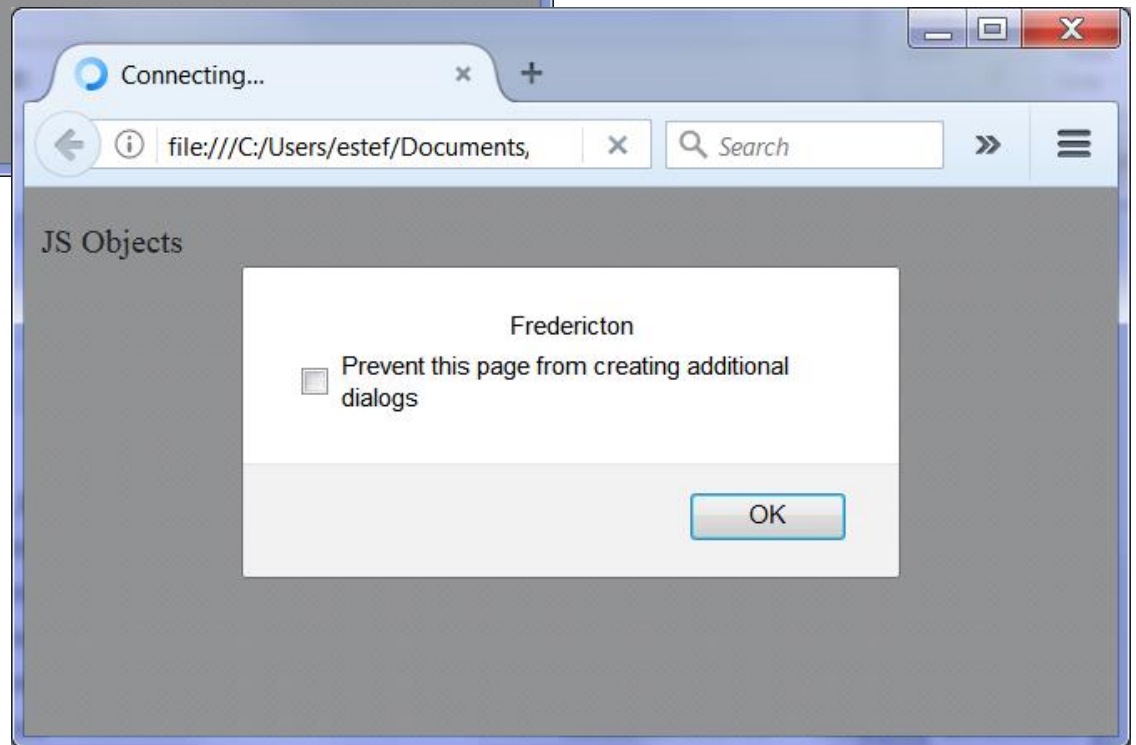
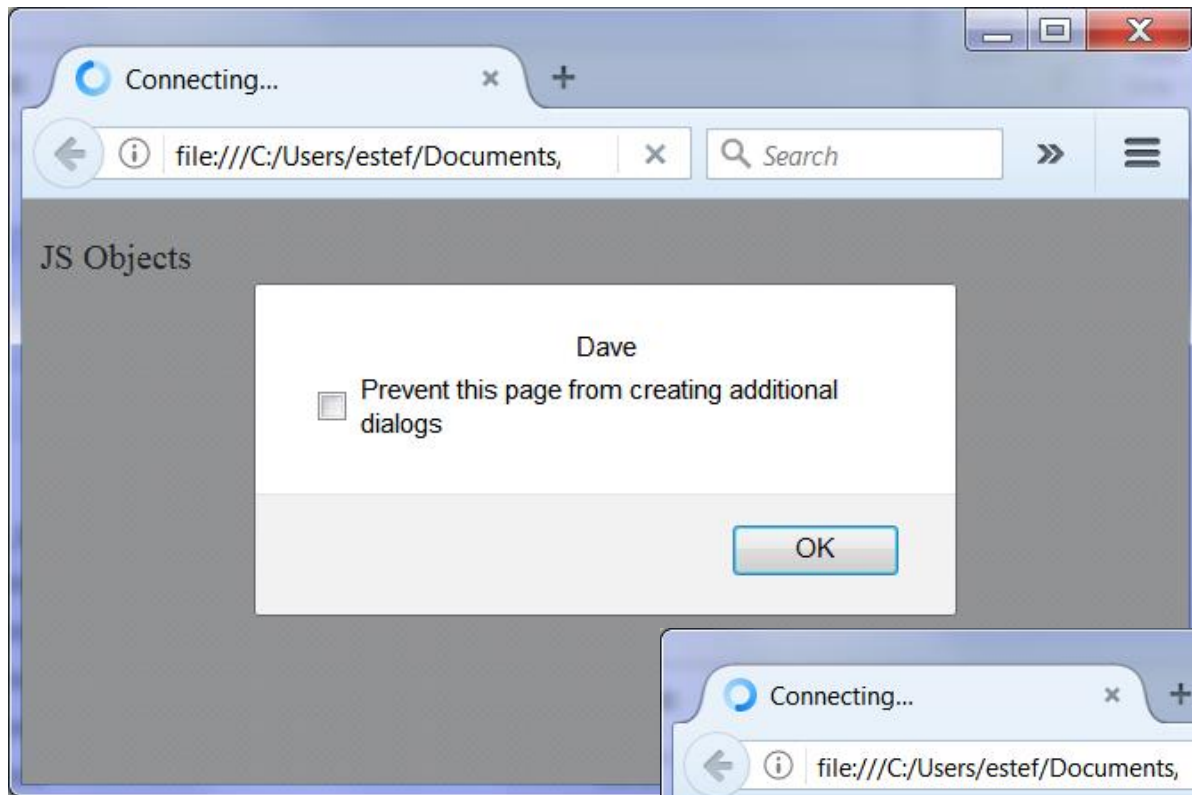




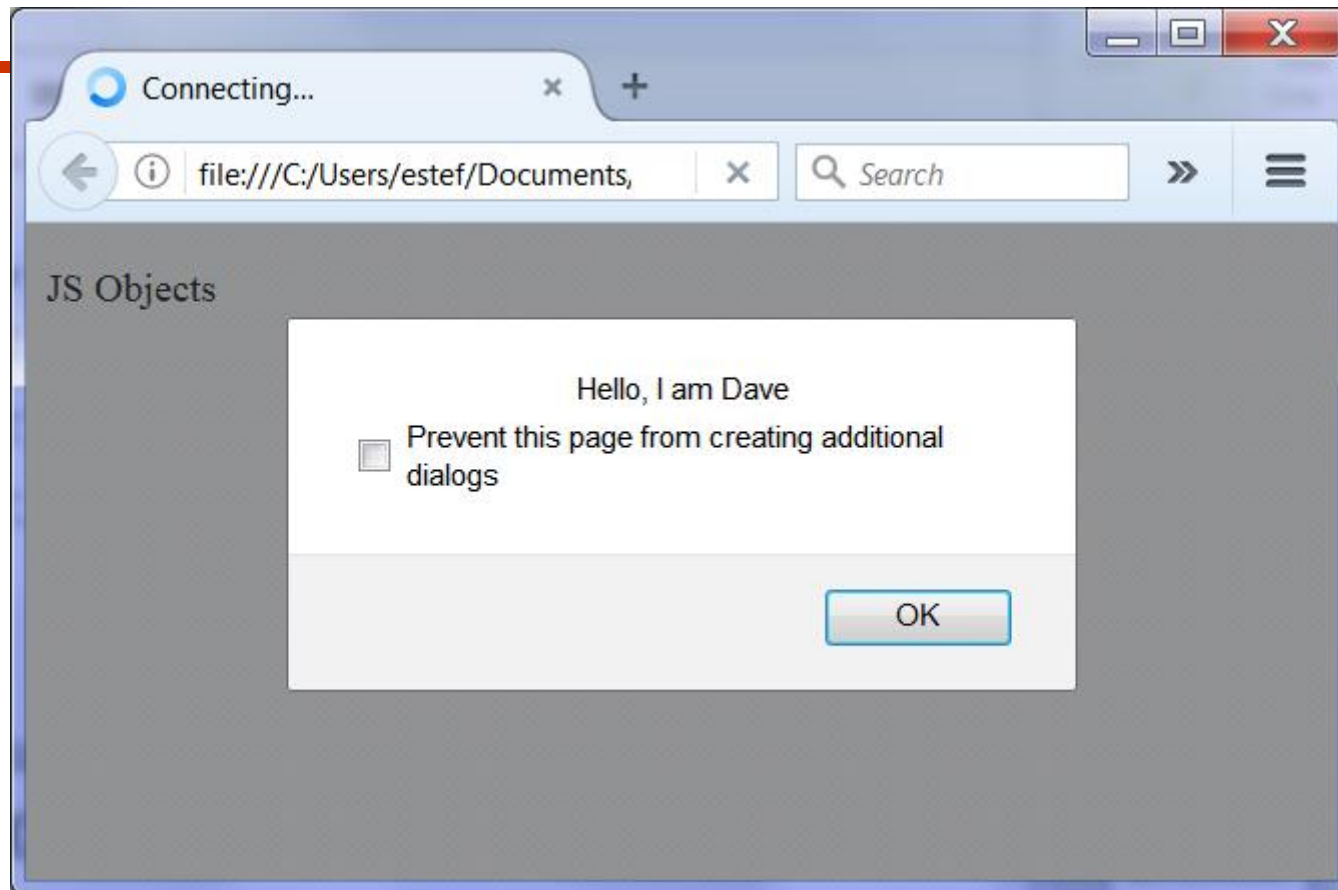
The image shows a Notepad++ window titled "C:\Users\estef\Documents\GGE5401\2017\LECTURES\Week_8\JS\code_6.html - Notepad++ [Administrator]". The menu bar includes File, Edit, Search, View, Encoding, Language, Settings, Macro, Run, Plugins, Window, and ?. The toolbar contains various icons for file operations and editing. The editor displays a JavaScript file named "code_6.html" with the following code:

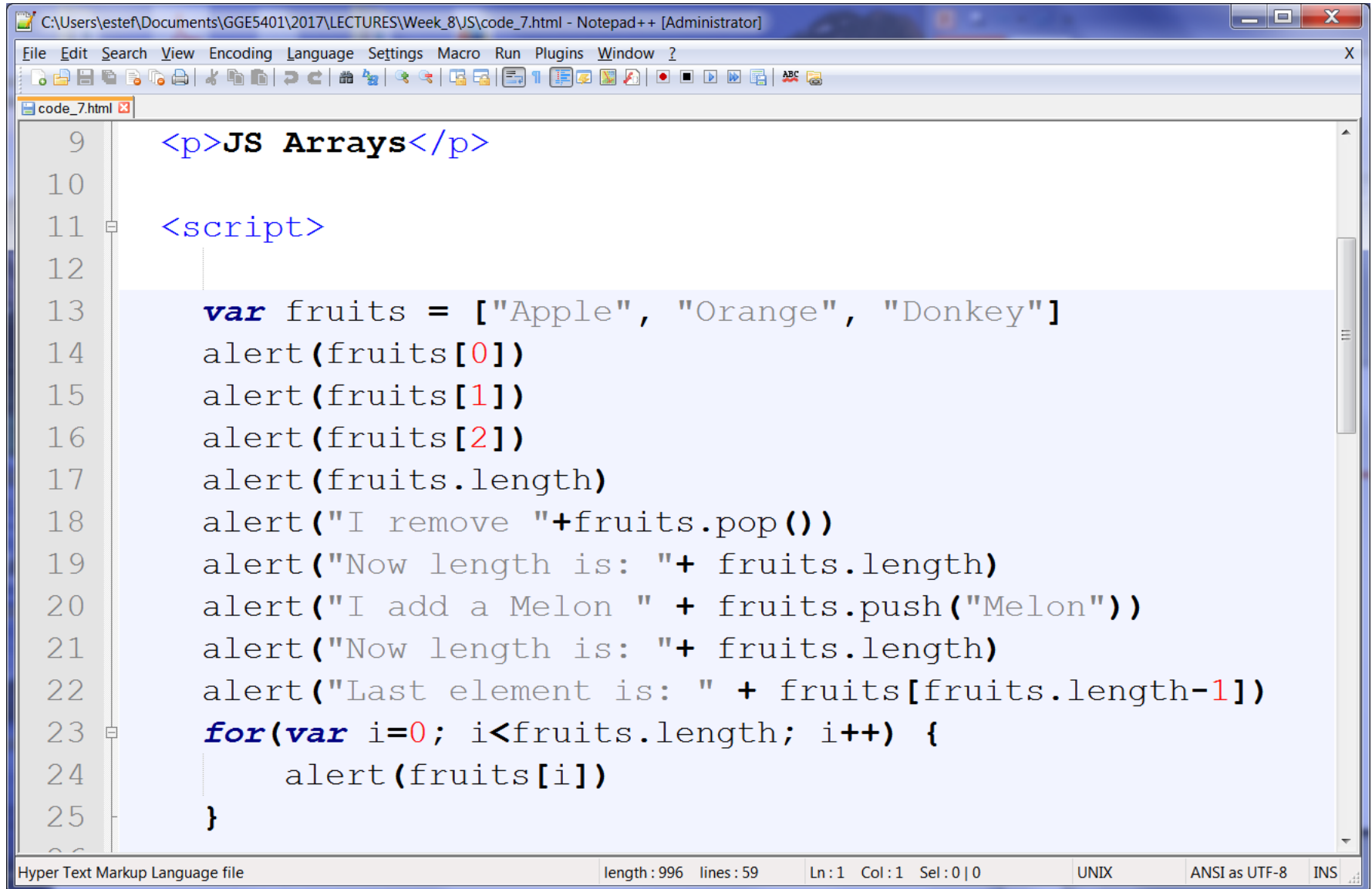
```
26  var user = {
27      name: "Dave",
28      age: 25,
29      address: {
30          number: 15,
31          street: "Dineen Drive",
32          city: "Fredericton"
33      }
34  }
35
36  alert( user.name ); // "Dave"
37  alert( user.address.city ); // "Fredericton"
38
39  // _
```

The status bar at the bottom indicates "Hyper Text Markup Language file", "length : 931", "lines : 62", "Ln : 20", "Col : 22", "Sel : 0 | 0", "UNIX", "ANSI as UTF-8", and "INS".



```
C:\Users\vestef\Documents\GGE5401\2017\LECTURES\Week_8\JS\code_6.html - Notepad++ [Administrator]
File Edit Search View Encoding Language Settings Macro Run Plugins Window ?
code_6.html x
41 var user1 = {
42     name: "Dave",
43     age: 25,
44     address: {
45         number: 15,
46         street: "Dineen Drive",
47         city: "Fredericton"
48     },
49     reportName: function() {
50         alert("Hello, I am "+this.name)
51     }
52 }
53 user1.reportName();
54
55 </script>
Hyper Text Markup Language file length: 931 lines: 62 Ln: 20 Col: 22 Sel: 0 | 0 UNIX ANSI as UTF-8 INS
```

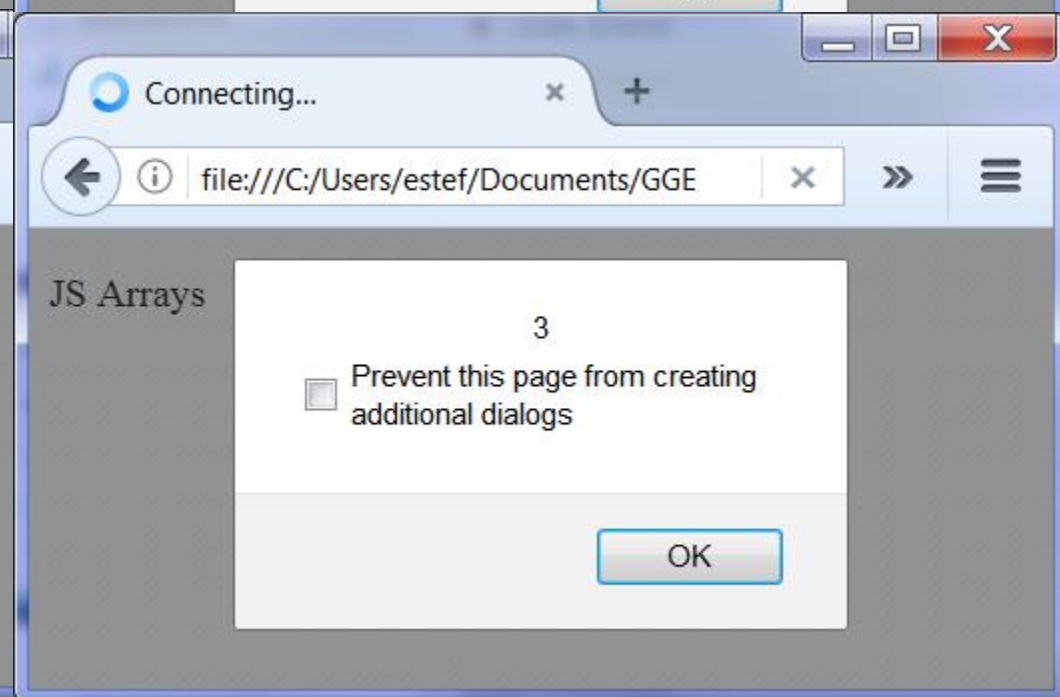
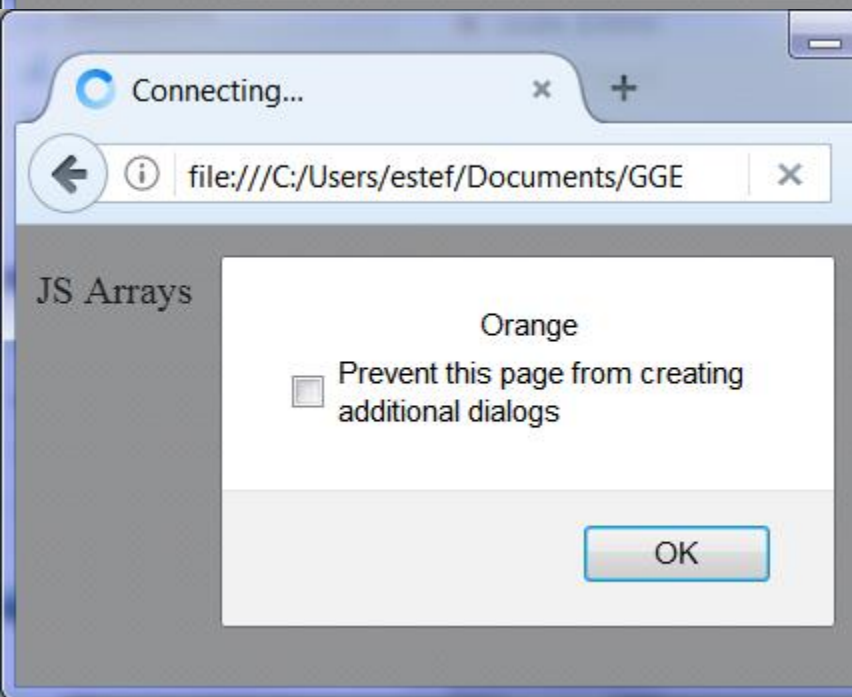
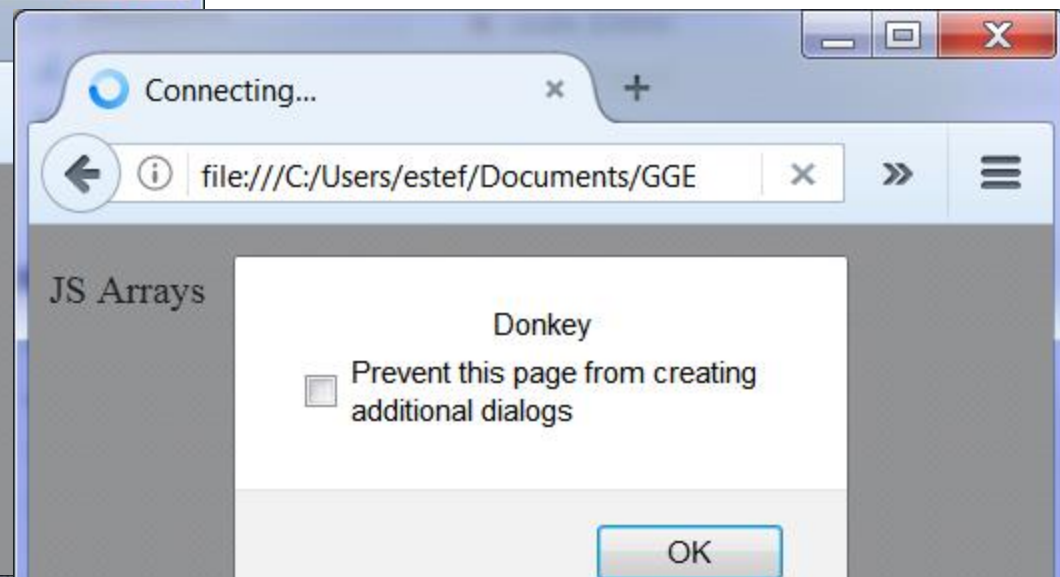
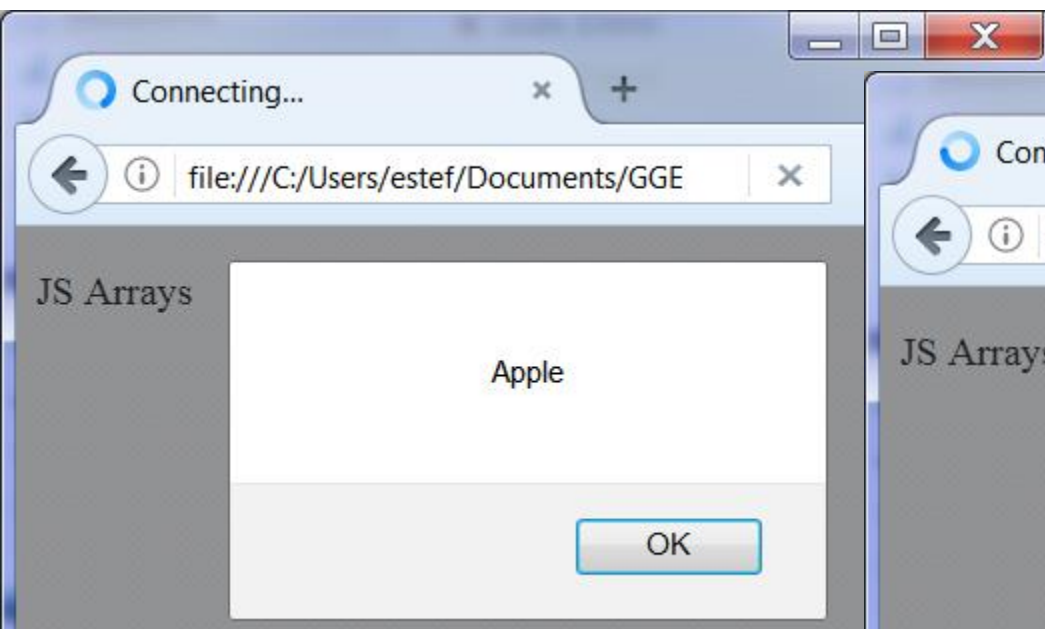


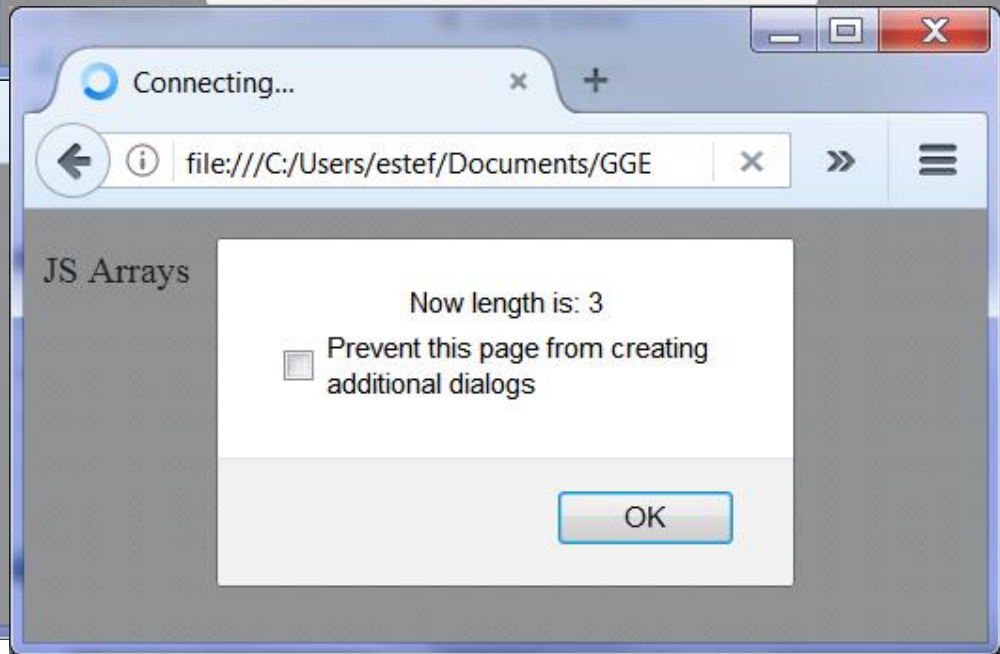
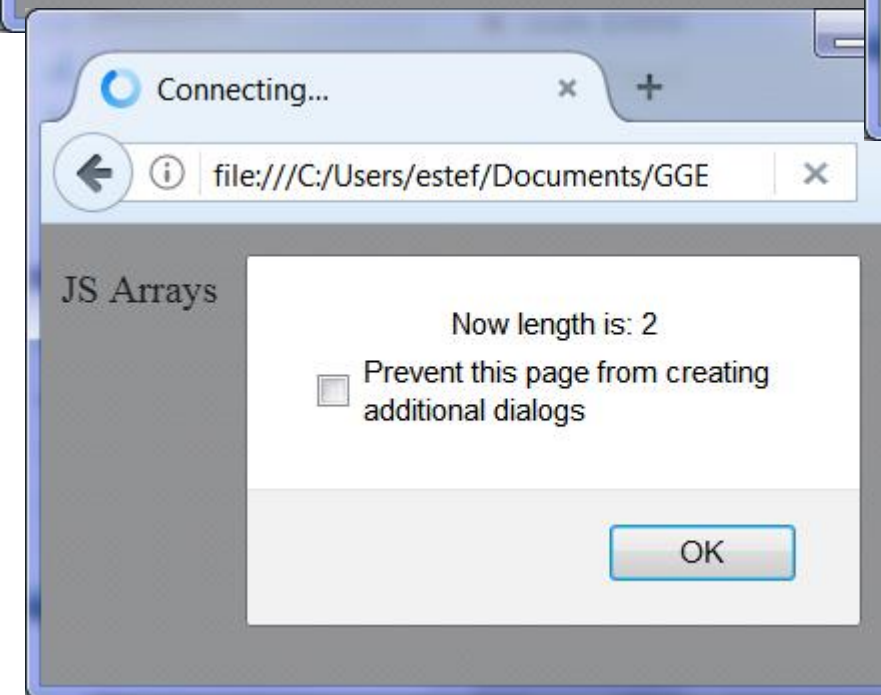
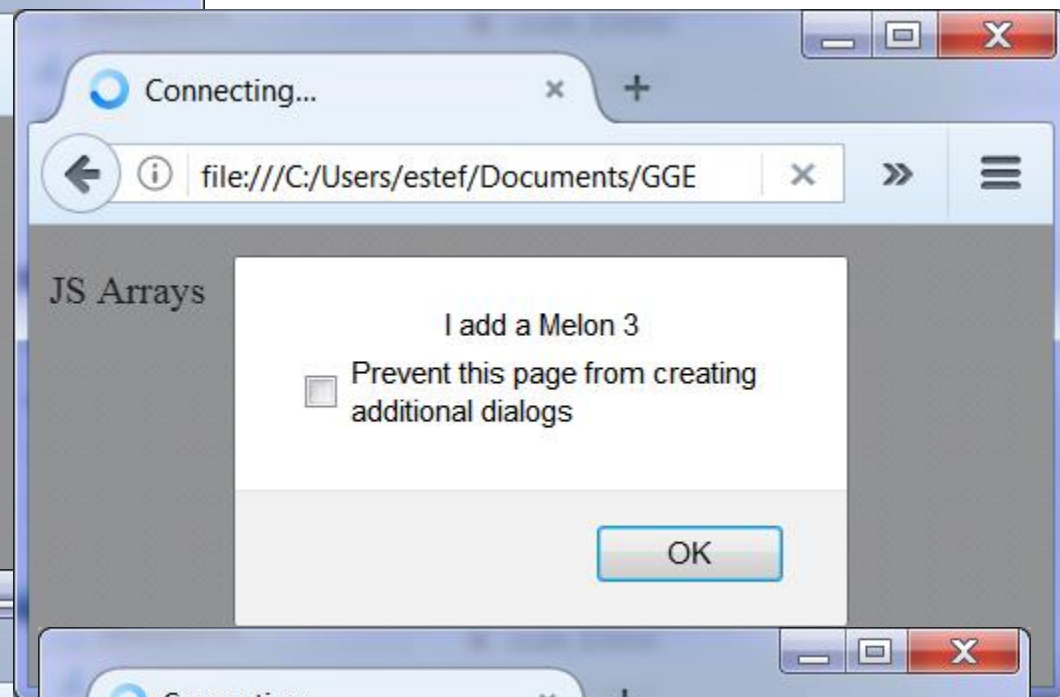
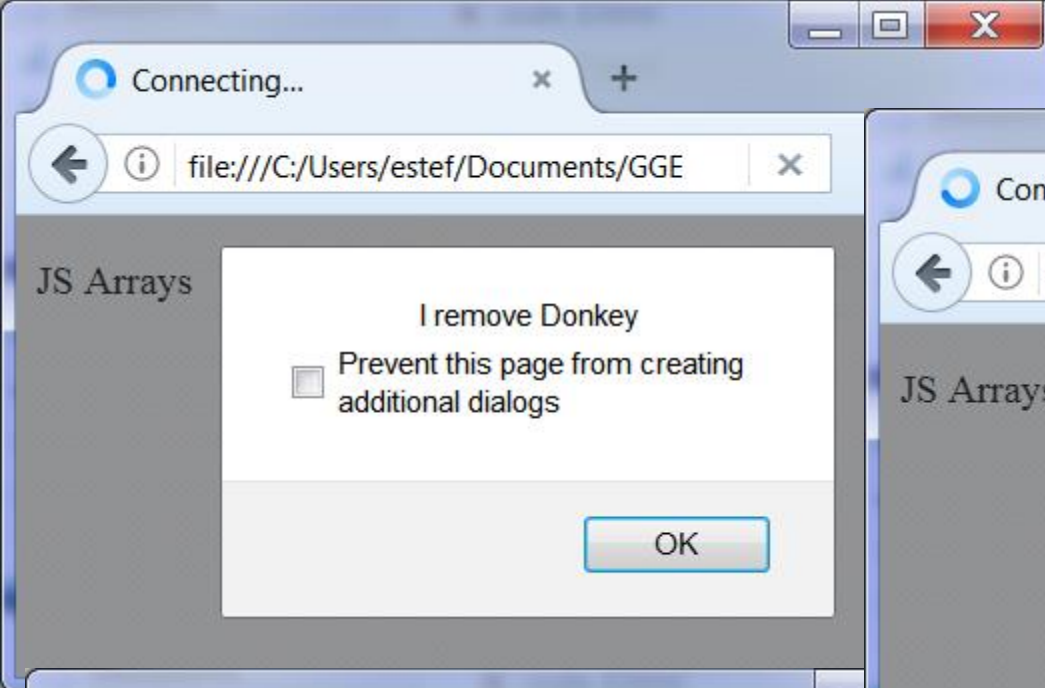


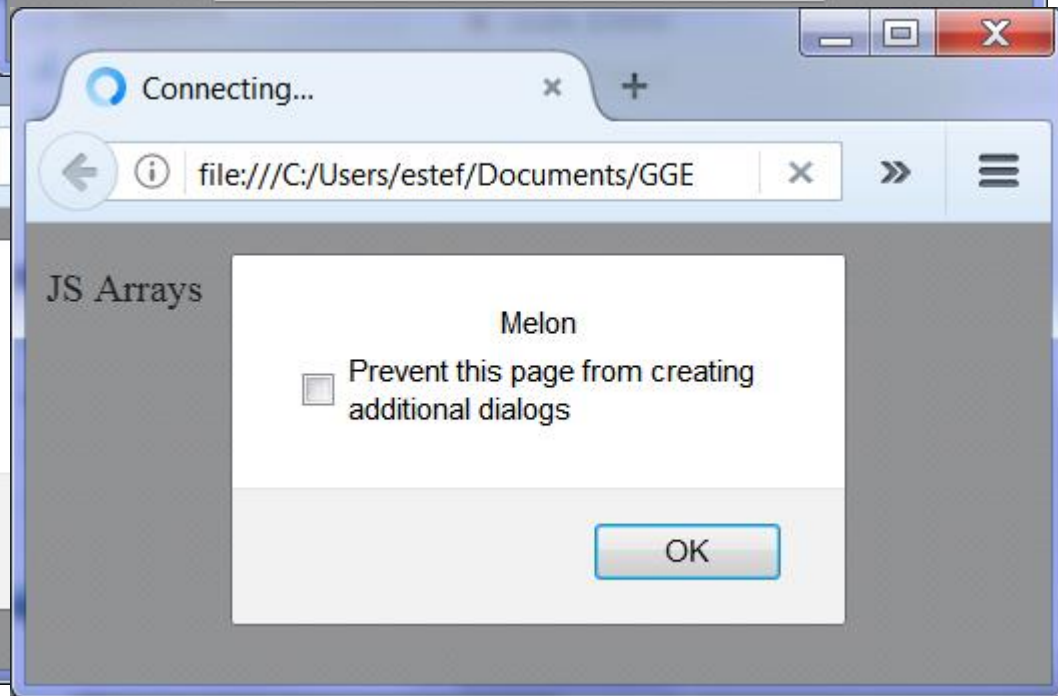
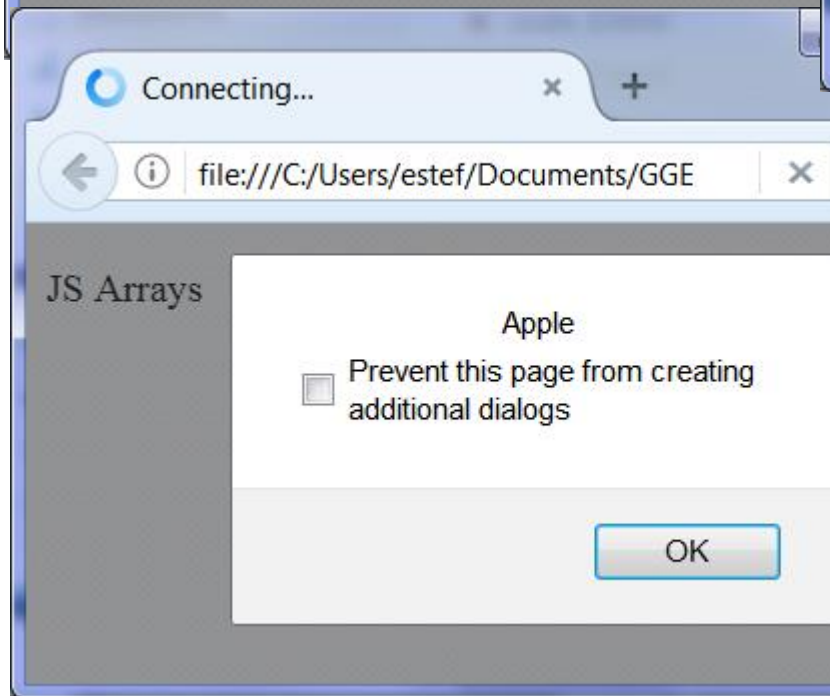
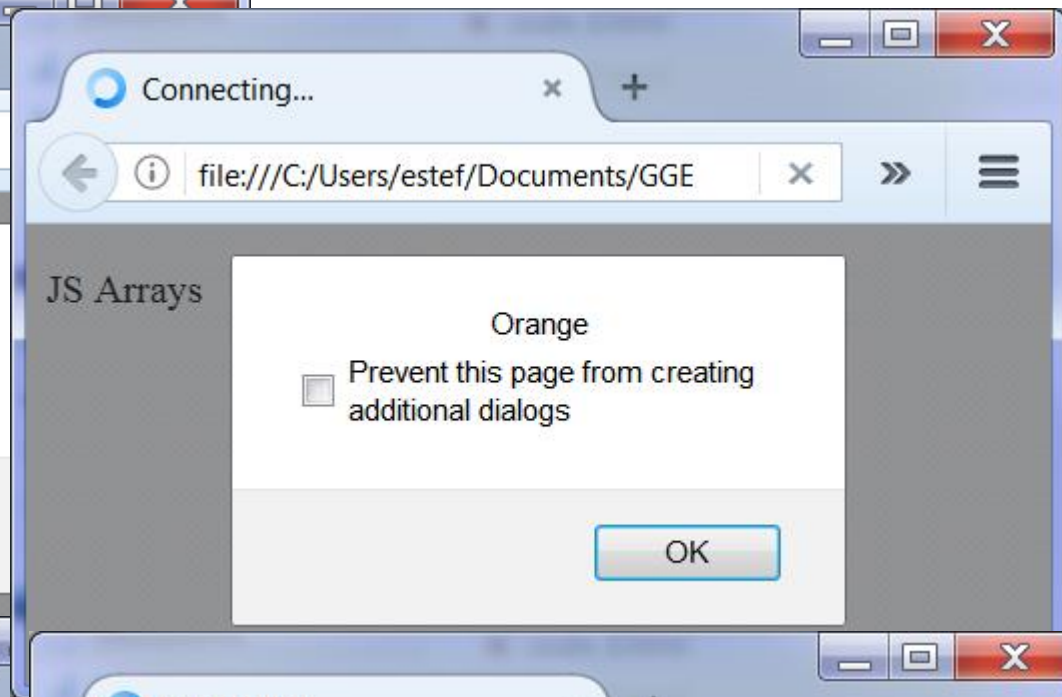
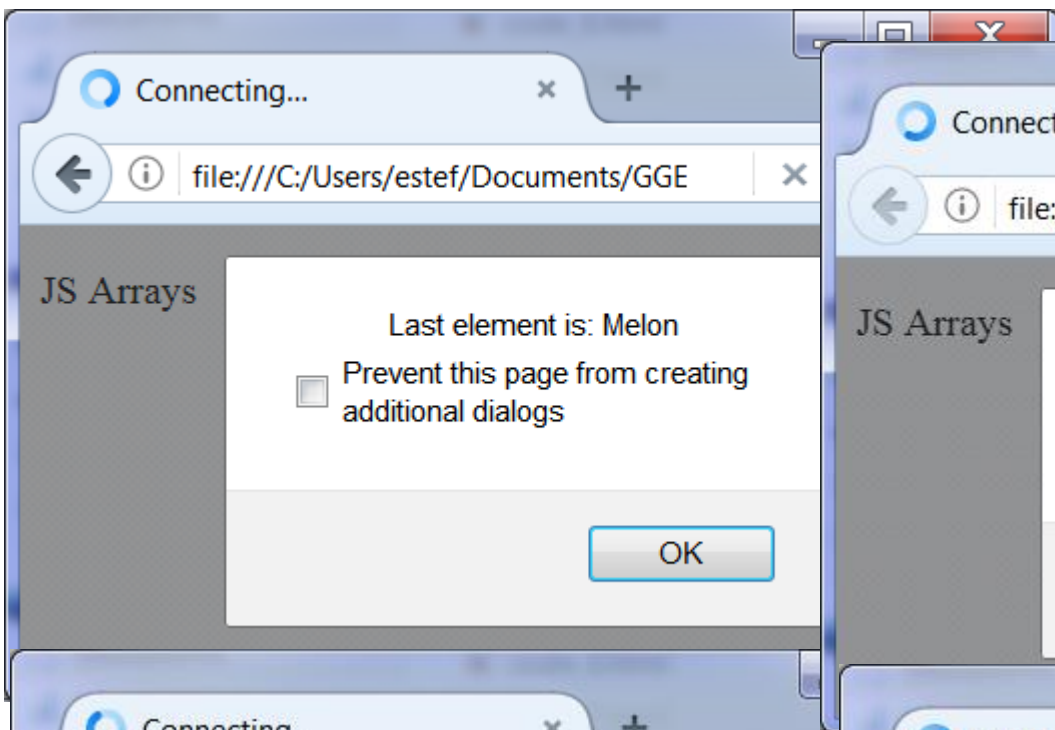
A screenshot of a Notepad++ window titled "C:\Users\estef\Documents\GGE5401\2017\LECTURES\Week_8\JS\code_7.html - Notepad++ [Administrator]". The window displays a JavaScript file named "code_7.html". The code is as follows:

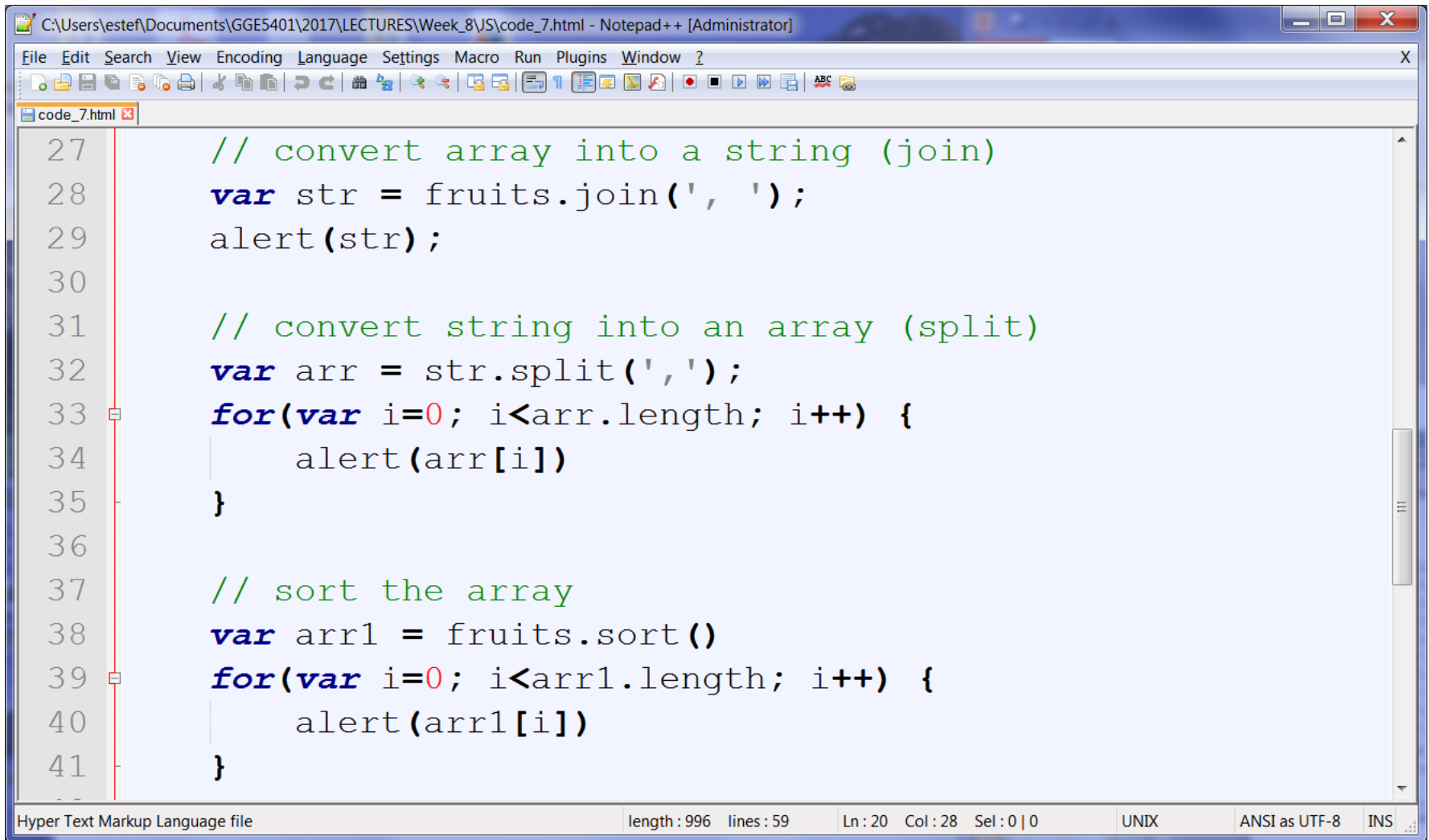
```
9      <p>JS Arrays</p>
10
11      <script>
12
13          var fruits = ["Apple", "Orange", "Donkey"]
14          alert(fruits[0])
15          alert(fruits[1])
16          alert(fruits[2])
17          alert(fruits.length)
18          alert("I remove "+fruits.pop())
19          alert("Now length is: "+ fruits.length)
20          alert("I add a Melon " + fruits.push("Melon"))
21          alert("Now length is: "+ fruits.length)
22          alert("Last element is: " + fruits[fruits.length-1])
23          for(var i=0; i<fruits.length; i++) {
24              alert(fruits[i])
25          }
```

The status bar at the bottom indicates "Hyper Text Markup Language file", "length : 996 lines : 59", "Ln : 1 Col : 1 Sel : 0 | 0", "UNIX", "ANSI as UTF-8", and "INS".





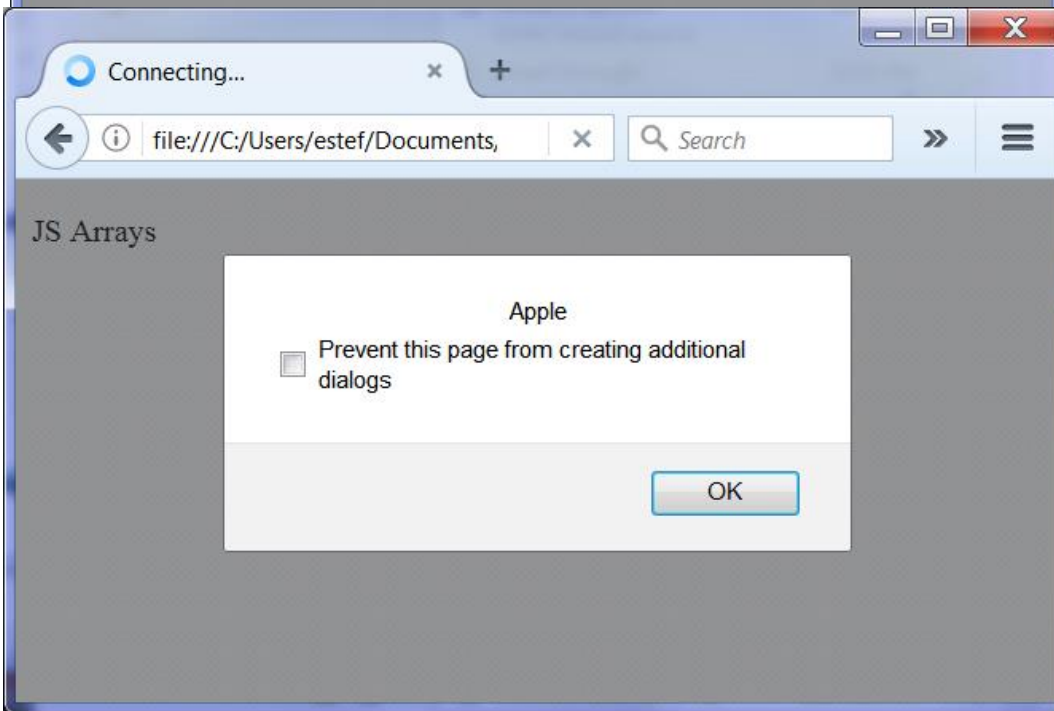
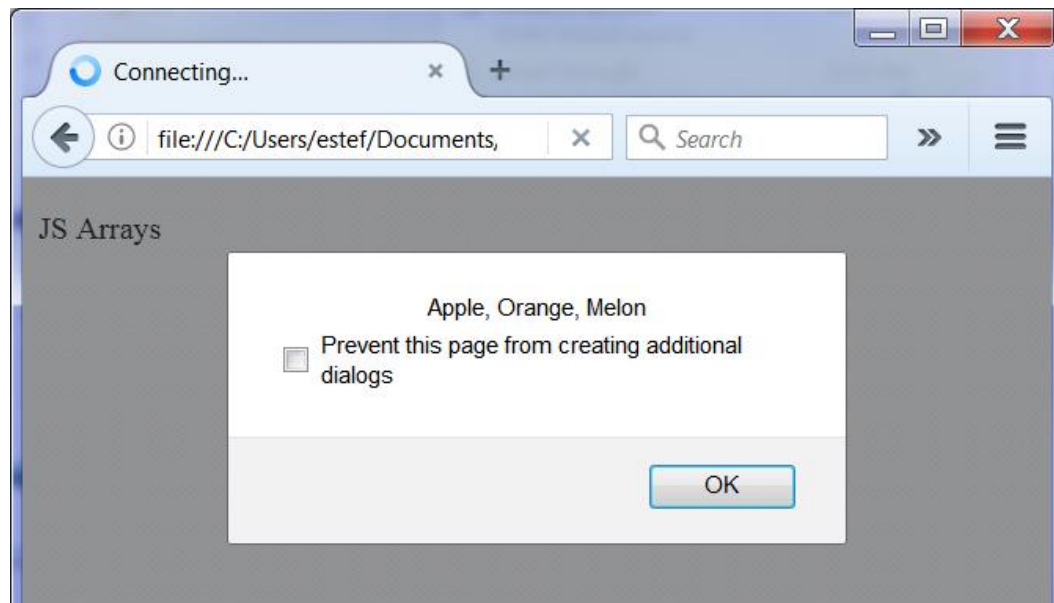




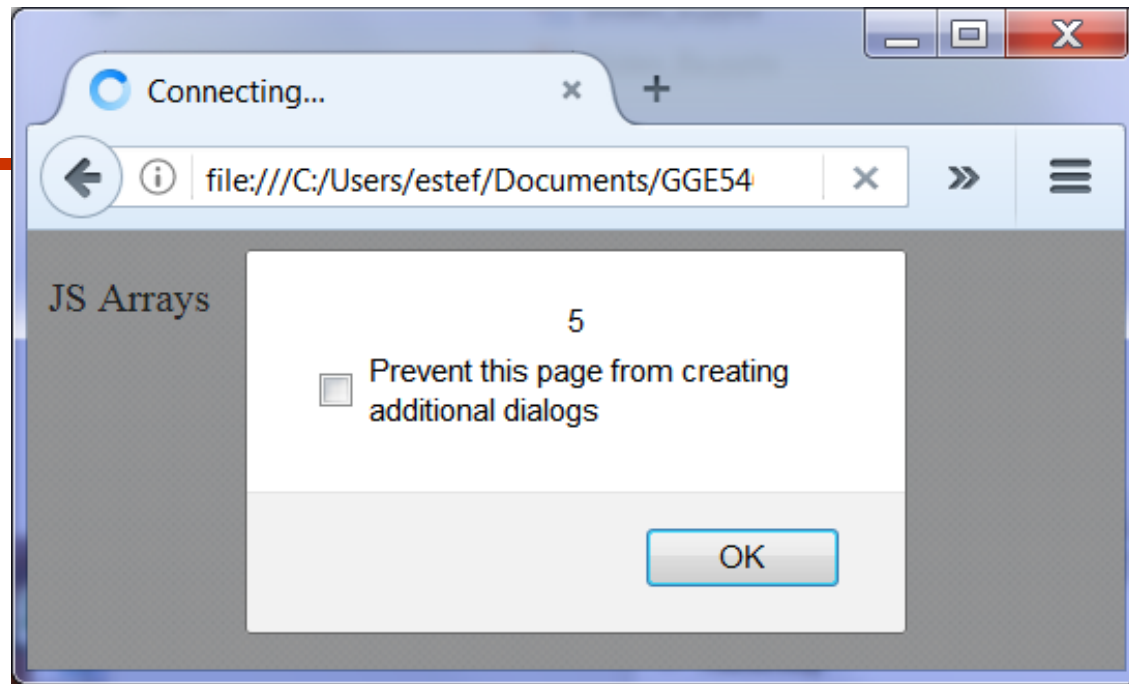
A screenshot of a Notepad++ window titled "C:\Users\estef\Documents\GGE5401\2017\LECTURES\Week_8\JS\code_7.html - Notepad++ [Administrator]". The window displays JavaScript code for array manipulation. The code includes comments for joining an array into a string, splitting a string back into an array, and sorting an array. The status bar at the bottom indicates the file is a "Hyper Text Markup Language file" with a length of 996, 59 lines, and the cursor is at line 20, column 28.

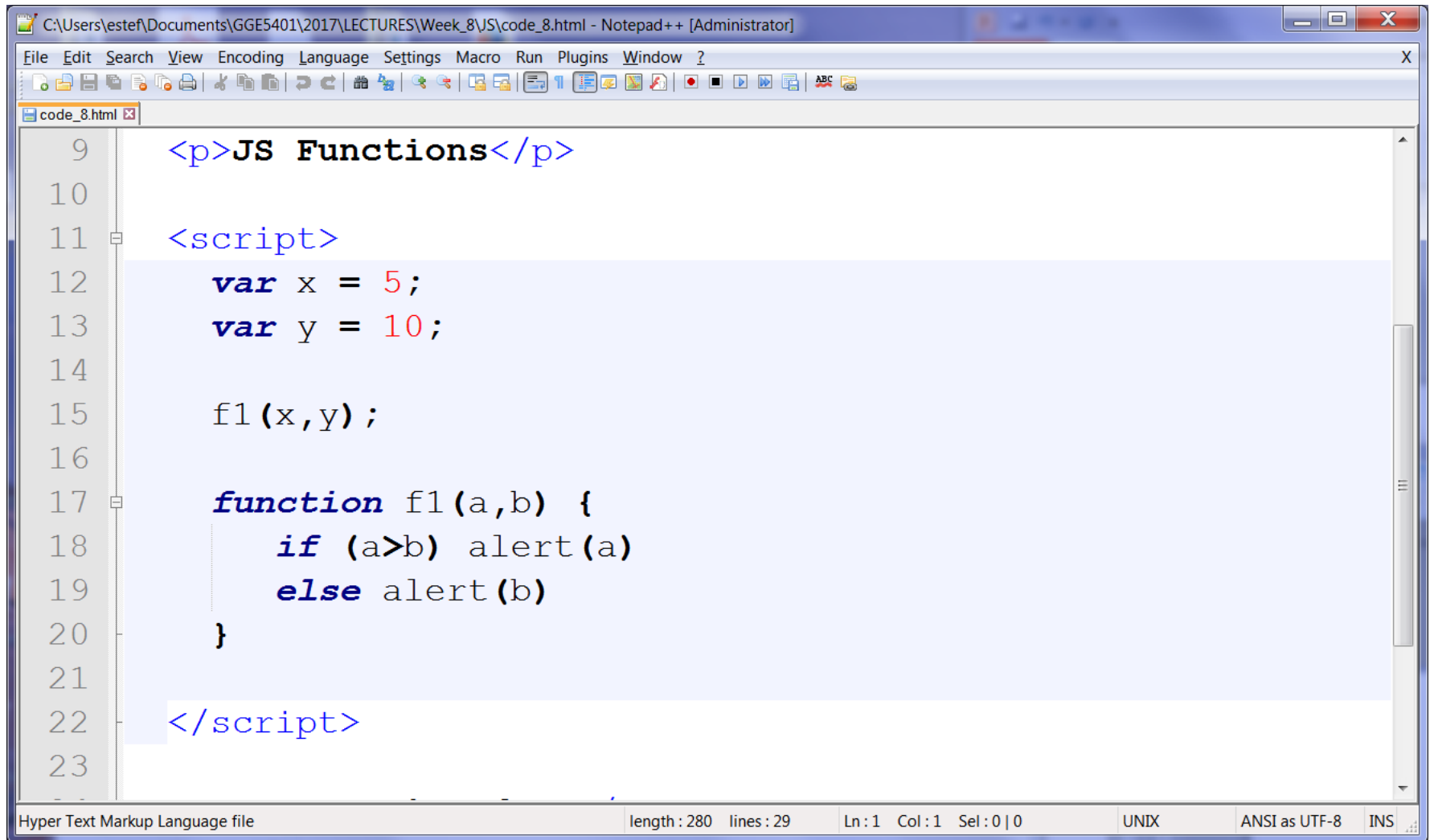
```
27 // convert array into a string (join)
28 var str = fruits.join(', ');
29 alert(str);
30
31 // convert string into an array (split)
32 var arr = str.split(', ');
33 for(var i=0; i<arr.length; i++) {
34     alert(arr[i])
35 }
36
37 // sort the array
38 var arr1 = fruits.sort()
39 for(var i=0; i<arr1.length; i++) {
40     alert(arr1[i])
41 }
```

Hyper Text Markup Language file | length : 996 | lines : 59 | Ln : 20 | Col : 28 | Sel : 0 | 0 | UNIX | ANSI as UTF-8 | INS



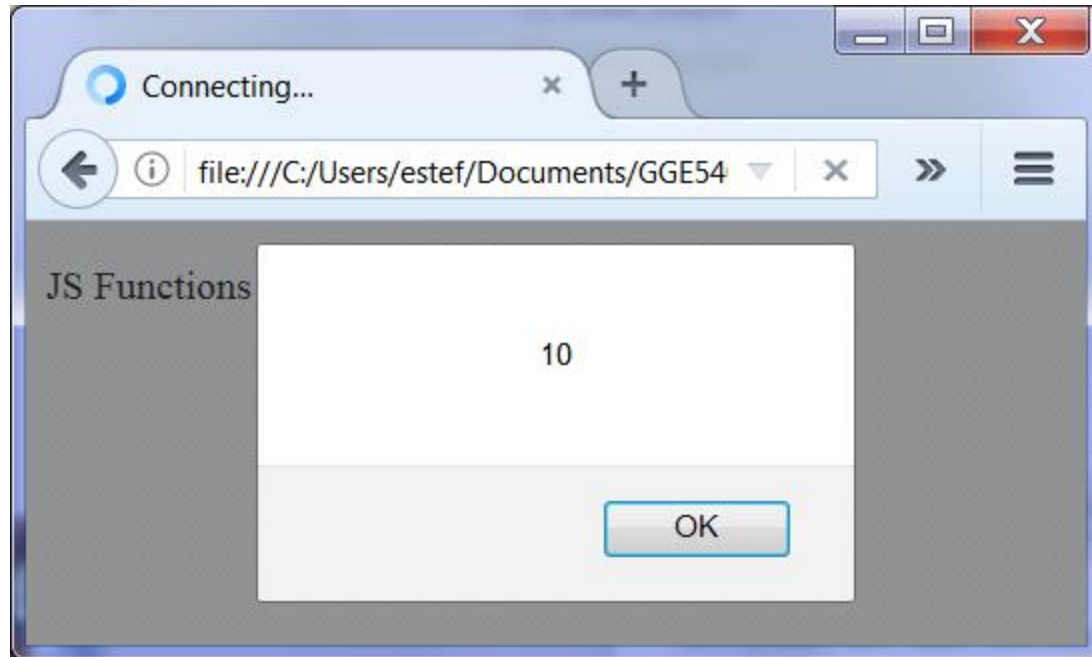

```
C:\Users\estef\Documents\GGE5401\2017\LECTURES\Week_8\JS\code_7.html - Notepad++ [Administrator]
File Edit Search View Encoding Language Settings Macro Run Plugins Window ?
code_7.html
42
43 // 2d array
44
45 var matrix = [
46     [1, 2, 3],
47     [4, 5, 6],
48     [7, 8, 9]
49 ]
50 alert(matrix[1][1]) // central element
51
52 </script>
53
54 <p>Have a nice day.</p>
55
56 </body>
Hyper Text Markup Language file length : 996 lines : 59 Ln : 37 Col : 23 Sel : 0 | 0 UNIX ANSI as UTF-8 INS
```





```
9      <p>JS Functions</p>
10
11      <script>
12          var x = 5;
13          var y = 10;
14
15          f1(x,y) ;
16
17          function f1(a,b) {
18              if (a>b) alert(a)
19              else alert(b)
20          }
21
22      </script>
23
```

Hyper Text Markup Language file length : 280 lines : 29 Ln : 1 Col : 1 Sel : 0 | 0 UNIX ANSI as UTF-8 INS



References

- JS Tutorial
 - <http://javascript.info/>