Midterm Review
Recitation 6 (Fall 2018)
CS1520

Q.1) Consider the following code:

```
 1  <!DOCTYPE html>
 2  <html>
 3  <head>
 4      <title>Midterm</title>
 5      <script type="text/javascript">
 6          function a1() { alert('Alert1'); }
 7          function a2() { alert('Alert2'); }
 8          function a3() { alert('Alert3'); }
 9          function a4() { alert('Alert4'); }
10      </script>
11  </head>
12  <body>
13      <table id="action-table">
14          <tbody id="action-body">
15              <tr id="action-row">
16                  <td>foo</td>
17                  <td>bar</td>
18              </tr>
19              <tr>
20                  <td id="action-entry">baz</td>
21                  <td>fuz</td>
22              </tr>
23          </tbody>
24      </table>
25      <script>
26          var actionTable = document.getElementById("action-table");
27          var actionBody = document.getElementById("action-body");
28          var actionRow = document.getElementById("action-row");
29          var actionEntry = document.getElementById("action-entry");
30
31          actionTable.addEventListener('click', a1, false);
32          actionBody.addEventListener('click', a2, true);
33          actionEntry.addEventListener('click', a3, true);
34
35          // YOUR CODE GOES HERE
36
37      </script>
38  </body>
39  </html>
```

a) What alerts will be produced (and in what order) if a user clicks on `fuz`? What is the `target` and `currentTarget` of each alert?

b) What alerts will be produced (and in what order) if a user clicks on `baz`? What is the `target` and `currentTarget` of each alert?

c) If possible, write Javascript to replace the comment in the source code (`// YOUR CODE GOES HERE`) such that clicking on `foo` will cause `Alert4` to be produced as the first alert. If this is not possible, explain why not.

Q.2) Consider the following JS code:

```
10 == "10ne" - "0ne";
```

Write down the final evaluation on each side of “==” and the final result.

Q.3) What is the value of z after executing the following code:

```
if (4=="4") {z="zebra";} else {z="ziggy";}
```

Q.4) What is the value of z after executing the following code:

```
if (4==="4") {z="zebra";} else {z="ziggy";}
```

Q. 5) Check all of the following that are evaluate to "true" in JavaScript

- ☐ null
- ☐ 3
- ☐ "Ouch!"
- ☐ 0
- ☐ NaN
- ☐ {shape: "round"}
- ☐ -1
- ☐ "" // i.e. the empty string

Q.6) What is the value of x after executing the following JavaScript?

```
var a = 4;
var b = NaN;
var x = a+b;
```

Q.7) What is the result of the following in JS:

a. 3=="3"
b. 3==3
c. 3==="3"
d. 3===3
e. 3!="3"
f. 3!=="3"

Q.8) What is the result of the following in JS:

a. 433+1
b. "433"+1
c. “433” + “1”
d. Number("443") + 1
e. “hello” + “bye”

Q.9) Take the following function, make it a method named "inc" of an object named "z" so that "z.inc(4)" would return 5.

```
function(y) {return ++y};
```

Q.10) Consider the following code. What is the final value of y?

```
function makeAdder(amount) {
   return function(number) {
      return number + amount;
   };
}
var x = makeAdder(5)
var y = x(3)
y = x(2)
```