

## CSc 055: Final Exam Review Solutions

Note that these are not the only solutions.

1.

```
/* is middle field blank? Answer 'yes' or 'no'
   in alert box AND fill in right field with "blank"
   or "filled in" */
function isMiddleBlank() {
    if (document.choices.middle.value == "") {
        alert("yes, blank.");
        document.choices.right.value="blank";
    }
    else {
        alert("no, filled in");
        document.choices.right.value="filled in";
    }
}
```

2.

```
/* alert which field, left or right, is bigger.
   Assumes the two numbers are unequal. The use
   of eval is mandatory here! Otherwise, it will
   fail with test data like 11 and 9. */
function findbigger()
{
    if (eval(document.choices.left.value) >
        eval(document.choices.right.value)) {
        alert("left is bigger");
    }
    else {
        alert("right is bigger");
    }
}
```

3.

```
/* alert which field, left or right, is bigger,
   or if they are equal. I'm using a shorthand way
   of writing the second 'if' clause inside the
   first 'else' clause by just saying 'else if'.
   Again, eval is mandatory. */
function findbiggerOrEqual()
{
    if (eval(document.choices.left.value) >
        eval(document.choices.right.value)) {
        alert("left is bigger");
    }
    else if (eval(document.choices.right.value) >
             eval(document.choices.left.value)) {
        alert("right is bigger");
    }
    else {
        alert("they are equal");
    }
}
```

4.

```
/* right field says "positive", "negative", or
   "zero" depending on what's in left field */
function isLeftPosNegZero() {
    if (eval(document.choices.left.value)>0) {
        document.choices.right.value = "positive";
    }
    else if (eval(document.choices.left.value)<0) {
        document.choices.right.value = "negative";
    }
    else {
        document.choices.right.value = "zero";
    }
}
```

5.

```
/* alerts which of the three fields the word "waldo"
   appears, or that it doesn't appear at all */
function findWaldo() {
    if (document.choices.left.value == "waldo") {
        alert("waldo in LEFT!");
    }
    else if (document.choices.middle.value == "waldo") {
        alert("waldo in MIDDLE!");
    }
    else if (document.choices.right.value == "waldo") {
        alert("waldo in RIGHT!");
    }
    else { /* must be nowhere! */
        alert("no waldo here...");
    }
}
```

6.

```
<input type="text" name="sample" />
<input type="button" name="mybutton" value="mybutton" onclick="tester();" />

function tester() {
    document.myform.sample.value="This is a test";
}
```

7. <input type="button" name="subtract" value="subtract" onclick="take5();" />

```
function take5() {
    document.myform.result.value=eval(document.myform.source.value)-5;
}
```

8. `<input type="button" name="move" value="move" onclick="moveIt();" />`

```
function moveIt() {
    if (document.myform.tweedledee.value==" " &&
        document.myform.tweedledum.value==" ") {
        document.myform.tweedledee.value=prompt("Enter a new word");
    }
    else if (document.myform.tweedledee.value!=" ") { /* != is not equal */
        document.myform.tweedledum.value=document.myform.tweedledee.value;
        document.myform.tweedledee.value=" ";
    }
    else { /* tweedledum must be the non-empty one */
        document.myform.tweedledee.value=document.myform.tweedledum.value;
        document.myform.tweedledum.value=" ";
    }
}
```

9. `<input type="button" name="toggle" value="toggle" onclick="toggleText();" />`

```
function toggleText() {
    if (document.myform.credit.value==" ") {
        document.myform.credit.value="hello there";
    }
    else {
        document.myform.credit.value=" ";
    }
}
```

10. The average, remember, is the sum of the numbers divided by how many numbers you have. How many numbers we have depends on how many checkbox buttons are on, so we'll check each button, and keep a running count of (a) how many buttons are "on" and (b) the sum of the numbers.

`<input type="button" name="average" value="average" onclick="findAvg();" />`

```
function findAvg() {
    total=0;
    howMany=0;
    if (document.myform.but1.checked==true) {
        howMany = howMany + 1;
        total = total + eval(document.myform.field1.value);
    }
    if (document.myform.but2.checked==true) {
        howMany = howMany + 1;
        total = total + eval(document.myform.field2.value);
    }
    /* etc. for buttons 3 through 9 */

    if (document.myform.but10.checked==true) {
        howMany = howMany + 1;
        total = total + eval(document.myform.field10.value);
    }
    if (howMany==0) {
        alert("please turn on at least one button!");
    }
    else {
        alert("average is " + (total/howMany));
    }
}
```

Check out "JSsols.html" on our CSc 055 web page to see the solutions to #6-#10 in action.