

```
1: /*jslint
2:  white:true
3: */
4: /*global
5:  prompt
6: */
7: //Define out variables
8: var num1 = 0;
9: var num2 = 0;
10: var userInput1;
11: var userInput2;
12: //Ask for the 1st number until we get
13: //a valid number
14: while(isNaN(num1) || num1 < 1 || num1 > 10){
15:     userInput1 = prompt("Enter a number between 1 and 10.");
16:     num1 = Number(userInput1);
17: }
18:
19: //Ask for the 2nd number until we get
20: //a valid number
21: while(isNaN(num2) || num2 < 1 || num2 > 10 ){
22:     userInput2 = prompt("Enter a second number between 1 and 10, "+
23:         " and I will add the two together.");
24:     num2 = Number(userInput2);
25: }
26: }
27:
28: //Get the drawing context
29: var canvas = document.getElementById("drawingSurface");
30: var ctx = canvas.getContext("2d");
31:
32: ctx.save();
33: //Shift the axis
34: ctx.translate(20, canvas.height/2);
35: var size = 10;
36: var spacing = 20;
37: //Draw the 1st set of boxes
38: var yOffset1 = -spacing * num1/2;
39: var i;
40: for(i = 0; i < num1; i = i+1){
41:     ctx.fillRect(20,yOffset1 + i*spacing,
42:         size, size);
43: }
44: //Add sign
45: ctx.fillRect(40,-5,40,10);
46: ctx.fillRect(55,-20,10,40);
47:
48: //Draw the 2nd set of boxes
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49: var yOffset2 = -spacing * num2/2;
50: for(i = 0; i < num2; i = i+1){
51:     ctx.fillRect(100,yOffset2 + i*spacing,
52:         size, size);
53: }
54:
55: //equal sign
56: ctx.fillRect(120,-15,40,10);
57: ctx.fillRect(120,5,40,10);
58:
59: //Draw the total number of boxes
60: var total = num1 + num2;
61: var yOffsetT = -spacing * total/2;
62: for(i = 0; i < total; i = i+1){
63:     ctx.fillRect(180,yOffsetT + i*spacing,
64:         size, size);
65: }
66: ctx.restore();
```