

Chocolate CodeOff 3 (Parameters, loops)

Problem 1: Given the following code, when you click on the second image on the page (pic2.jpg), which image changes?

What does it change to? _____

```
function MyFunc(par1)
{
  if (par1 == "pic1")
  {
    document.images[par1].src = "stop.jpg"
  }
  if (par1 == "pic2")
  {
    document.images[par1].src = "slow.jpg"
  }
  if (par1 == "pic3")
  {
    document.images[par1].src = "go.jpg"
  }
}
</script>
</head>
<body>
  <h1>Signals </h1>
  <p>
    <img src = "pic1.jpg" width = "20" height = "10" alt = "a pic" id = "pic3" onClick = "MyFunc('pic2')" >
    <img src = "pic2.jpg" width = "20" height = "10" alt = "a pic" id = "pic1" onClick = "MyFunc('pic3')" >
    <img src = "pic3.jpg" width = "20" height = "10" alt = "a pic" id = "pic2" onClick = "MyFunc('pic1')" >
  </p>
```

Problem 2: Given the following code snippet, what picture is displayed when the second image is clicked on?
_____ Where is it displayed? _____

```
arr = new Array()
arr[0] = "pic4"
arr[1] = "pic3"
arr[2] = "pic1"
arr[3] = "pic2"
arr[4] = "pic5"

arr2 = new Array()
arr2[0] = "van.jpg"
arr2[1] = "truck.jpg"
arr2[2] = "car.jpg"
arr2[3] = "bike.jpg"
arr2[4] = "train.jpg"

function ChangeIt(holder1, holder2)
{
  document.getElementById[arr[holder2]].src = arr2[holder1]
}
</script>
</head>
<body>
  <p>
    <img src = "pic1.jpg" width = "500" height = "375" id = "pic1" onClick = "ChangeIt(4,2)">
    <img src = "pic2.jpg" width = "500" height = "375" id = "pic2" onClick = "ChangeIt(3,1)">
    <img src = "pic3.jpg" width = "500" height = "375" id = "pic3" onClick = "ChangeIt(0,4)">
    <img src = "pic4.jpg" width = "500" height = "375" id = "pic4" onClick = "ChangeIt(1,3)">
  </p>
```

Problem 3: Given the following code, when this function is done running, what does p0 hold (or where is p0 positioned from the left? _____)

```
<script>
  var ct = 0
  var pos = 0
  function ffunc() {
    if (ct < 5) {
      pos = pos + 10
      document.getElementById('p0').position = 'absolute'
      document.getElementById('p0').style.left = pos + "px"
      document.getElementById('p0').innerHTML = pos + "px"
      ct = ct + 1
      setTimeout(function(){ffunc()},50)
    }
  }
</script>
</head>
<body>
<p id = 'p0' onClick = "ffunc()" style = "padding: 10px;position: absolute; left:0px;op: 10px">0</p>
```

Problem 4: What is p1's innerHTML changed to when bfunc() is called? _____

```
function bfunc(x) {
  var ns = "a b"
  var k = 0
  while (k < x) {
    ns = ns + 'an'
    k = k + 1
  }
  ns += 'a'
  document.getElementById('p1').innerHTML = ns}
</script>
</head>
<body>
  <p id = 'p1' onClick = "bfunc(2)">fa</p>
```

Problem 5: What is p2's innerHTML changed to when cfunc() is called? _____

```
function cfunc(z,y,x) {
  var ns = ""
  if (x == 3) {
    ns = ns + "John "
  }
  else if (x == 13) {
    ns = ns + "Joe "
  }
  else if (x == 7) {
    ns = ns + "Sam "
  }
  else {
    ns = ns + "Bob "
  }
  if (y == 2) {
    ns = ns + "you "
  }
  else if (y == 3) {
    ns = ns + "I "
  }
  else if (y == 4) {
    ns = ns + "she "
  }
  else if (y == 5) {
    ns = ns + "he "
  }
  else {
    ns = ns + "it "
  }
  if (z == 17) {
    ns = ns + "am "
  }
  else if (z == 24) {
    ns = ns + "was "
  }
  else if (z == 32) {
    ns = ns + "love "
  }
  else {
    ns = ns + "ran over "
  }
  document.getElementById('p2').innerHTML = ns
}
</script>
</head>
<body>
  <p id = 'p2' onClick = "cfunc(17,3,7)"> Prob 3 </p>
```

Problem 6: What is p3's background color when this code is done running? _____
var val = 0

```
    var val2 = 0
    var cArr = new Array()
    cArr[0] = 'blue'
    cArr[1] = 'red'
    cArr[2] = 'yellow'
    cArr[3] = 'green'
    cArr[4] = 'orange'
    function dfunc() {
        if (val2 < 7) {
            document.getElementById('p3').style.backgroundColor = cArr[val]
            val=val+1
            val2 = val2 + 1
            if (val== cArr.length) {
                val = 0
            }
            setTimeout(function(){dfunc()},300)
        }
    }
</script>
</head>
<body>
    <p id = 'p3' onClick = "dfunc()"> Prob 4 </p>
```

Problem 7: What is p4's innerHTML changed to? _____

```
    var mArr = new Array();
    mArr[0] = 'be'
    mArr[1] = 'r'
    mArr[2] = 'ds'
    mArr[3] = 'me'
    mArr[4] = 'ph'
    mArr[5] = 'um'
    mArr[6] = 'ch'
    mArr[7] = 's'

    var st = ""
    var x = mArr.length -1
    function kfunc() {
        if (x >= 0) {
            st = st + mArr[x]
            x = x - 2
            setTimeout(function(){kfunc()},5);
        }
        else {
            document.getElementById('p4').innerHTML = st
        }
    }
</script>
</head>
<body>
    <p id = 'p4' onClick = "kfunc()">Prob 5 </p>
```

Problem 8: Worst slot machine ever: Add the necessary code so that the none of the 3 images displayed are ever the same:

```

var iArr = new Array()
iArr[0] = "apple.jpg"
iArr[1] = "bell.jpg"
iArr[2] = "cherries.jpg"
iArr[3]= "plums.jpg"
iArr[4]= "seven.jpg"
function sfunc() {
    var f = Math.floor(Math.random() * iArr.length)
    document.getElementById('i1').src = iArr[f]
    var s = Math.floor(Math.random() * iArr.length)
    _____

    _____/* hint: this is just a closing squiggly bracket */
    document.getElementById('i2').src = iArr[s]
    var t = Math.floor(Math.random() * iArr.length)
    _____

    _____/* hint: this is just a closing squiggly bracket */
    document.getElementById('i3').src = iArr[t]
}
</script></head><body>
    <table><tr><td><img id = 'i1' width = 100 height = 100></td>
        <td><img id = 'i2' width = 100 height = 100></td>
        <td><img id = 'i3' width = 100 height = 100></td>
    </td></tr>
</table>
<input type = "button" onClick = "sfunc()" value = "click here">

```

Problem 9: what happens to puppy1 when you click on t3? What happens to puppy2?

```

function s2func(dog,cat) {
    var slug= 200
    var bug = 200
    if (dog == 's') {
        slug = slug/2
        bug = bug/2
    }
    else if (dog == 'b') {
        slug= slug*2
        bug = bugdancer*2
    }
    document.getElementById(cat).width= slug
    document.getElementById(cat).height =bug
}
</script></head><body>
<table><tr><td colspan = '2'>
    <img src = "puppy1.jpg" width = 150 height = 150 id = 'i1'>
</td><tr><tr><td id = 't1' onClick = "s2func('s','i1')">s</td>
<td id = 't2' onClick = "s2func('b','i1')">b</td>
</tr><tr><td colspan = '2'>
<img src = "puppy2.jpg" width = 200 height = 200 id = 'i2'>
</td><tr><tr><td id = 't3' onClick = "s2func('s','i2')">s</td>
<td id = 't4' onClick = "s2func('b','i2')">b</td>
</tr>
</table>

```

Problem 10: What is the html page changed to? _____

```
var iArr = new Array();
iArr[0] = 's1'
iArr[1] = 's2'
iArr[2] = 's3'
iArr[3] = 's4'

var nArr = new Array();
nArr[0] = 'c'
nArr[1] = 'ph'
nArr[2] = 'o'
nArr[3] = 'ser'
nArr[4] = 'di'
nArr[5] = 'li'
nArr[6] = 'ng'
nArr[7] = 'ol'

function afunc() {
    while (x < iArr.length) {
        document.getElementById([iArr[x]].innerHTML=nArr[x*2]
        x = x + 1
    }
    document.getElementById('p5').innerHTML = st
}
```

```
</script></head><body>
    <p id = 'p5' onClick = "afunc()">I Love <span id = "s1">a</span><span id = "s2">b</span><span id =
"s3">c</span><span id = "s4">d</span>!</p>
*****
```

Problem 11: Add the line so that when p7 and p6 are in exactly the same place, the score increases by 10:

```
var lo = 0;
var to = 0;
var lx = 0;
var tx = 0;
var score = 0;
function mfunc() {
    lo = Math.floor(Math.random() * 400)
    to = Math.floor(Math.random() * 400)
    document.getElementById('p6').position = "absolute"
    document.getElementById('p6').style.left = lo+"px"
    document.getElementById('p6').style.top = to+"px"
    lx = Math.floor(Math.random() * 400)
    tx = Math.floor(Math.random() * 400)
    document.getElementById('p7').position = "absolute"
    document.getElementById('p7').style.left = lx+"px"
    document.getElementById('p7').style.top = tx+"px"

    if _____ {
        score = score+10
        document.getElementById('sco').innerHTML = score;
    }
    setTimeout(function() {mfunc()},500)
}
```

```
</script></head><body>
<p id = 'sco'></p>
<p id = 'p6' style = "padding: 10px;position: absolute; left:0px;top: 10px">0</p>
<p id = 'p7' style = "padding: 10px;position: absolute; left:0px;top: 10px">X</p>
<input type = "button" onClick = "mfunc()" value = "click here">
```

Problem 12: what is printed when this function is called?_____

What is this function checking for (hint: there's a word for it):_____

```
var arr = new Array()
arr[0] = "u"
arr[1] = "d"
arr[2] = "e"
arr[3] = "l"
arr[4] = "e"
arr[5] = "d"
arr[6] = "u"

var t = arr.length-1
var v = 0
var x = true

function pfunc(){
  if (v != t) {
    if (arr[v] != arr[t]) {
      x = false
    }
    v = v + 1
    t = t - 1
    setTimeout(function(){pfunc()},5)
  }
  else {
    document.getElementById('p8').innerHTML = x
  }
}
}
</script></head><body>
  <p id = 'p8'>u</p>
  <input type = "button" onClick = "pfunc()" value = "click here">
*****
```

Problem 13: The code below should generate new random top and left (x,y) coordinates for the paragraph on the page, and then slowly move the paragraph to those new x and y coordinates in 30 separate steps. Add the lines of code so that the paragraph will move randomly around the board to the new x and y coordinates (it won't jump – it will move gradually in increments of 30):

```

<script>
    var xcoord = 10.0;
    var ycoord = 10.0;

    function getXY()
    {
        var x = Math.floor(Math.random() * 300)
            var y = Math.floor(Math.random() * 300)

        _____

        _____

        var ychange = (y-ycoord) / 50;
        count = 0;
        Move(xchange,ychange)
    }
    function Move(xc, yc) {
        count = count + 1;
        if (count < 50) {
            ycoord = ycoord + yc;
            xcoord = xcoord + xc;
            var y = Math.floor(ycoord)
            var x = Math.floor(xcoord)
            document.getElementById('p1').style.position = "absolute"
            document.getElementById('p1').style.left = x + "px"
            document.getElementById('p1').style.top = y + "px"
            setTimeout(function() {Move(xc,yc)}, 30)
        }
        else {
            getXY();
        }
    }
}
</script>
</head>
<body >
<h2 id = 'tmp'> <h2>
<div id = "board" onClick = "getXY()" >
    <p id = 'p1'>x</p>
</div>

```


Extra (for fun!): What does this code make?

```
function cofunc(x) {
    var k = document.getElementById('text').innerHTML
    k = k + x
    document.getElementById('text').innerHTML=k
}
function c2func() {
    var k = document.getElementById('text').innerHTML
    var ct = 1
    while (k[ct] != "*" && k[ct]!="/" && k[ct] != '+' &&k[ct] != '-') {
        ct = ct + 1;
    }
    var y = parseInt(k.slice(0,ct))
    var z = parseInt(k.slice(ct+1,k.length))
    if (k[ct] == '*') {
        var q = y*z
        document.getElementById('text').innerHTML = q
    }
    else if (k[ct] == '/') {
        var q = y/z
        document.getElementById('text').innerHTML = q
    }
    else if (k[ct] == '+') {
        var q = y+z
        document.getElementById('text').innerHTML = q
    }
    else if (k[ct] == '-') {
        var q = y-z
        document.getElementById('text').innerHTML = q
    }
}
}
</script>
</head>
<body>
<table><tr><td colspan = '3' id = 'text'></td></tr>
<tr><td onClick = "cofunc(1)">1</td>
    <td onClick = "cofunc(2)">2</td>
    <td onClick = "cofunc(3)">3</td>
</tr><tr>
    <td onClick = "cofunc(4)">4</td>
    <td onClick = "cofunc(5)">5</td>
    <td onClick = "cofunc(6)">6</td>
</tr><tr>
    <td onClick = "cofunc(7)">7</td>
    <td onClick = "cofunc(8)">8</td>
    <td onClick = "cofunc(9)">9</td>
</tr><tr>
    <td onClick = "cofunc('+)">+</td>
    <td onClick = "cofunc(0)">0</td>
    <td onClick = "cofunc('-)">-</td>
</tr><tr>
    <td onClick = "cofunc('*)">*</td>
    <td onClick = "c2func()">GO</td>
    <td onClick = "cofunc('/')">/</td>
</tr>
</table>
</body>
</html>
```