Name _____ Number _____

CSCI202, Spring 2017, Midterm Exam

Solutions

1. Give a short section of HTML and draw a circle around the part selected by the following selector:

   `p.mypar{ color : red }`

   `<p class="mypar"> Hello. </p>`

2. Give a short section of HTML and draw a circle around the part selected by the following selector:

   `span#myspan{ color : red }`

   `<span id="myspan"> Hello. </span>`

3. Give a short section of HTML and draw a circle around the part selected by the following selector:

   `p + span{ color : red }`

   `<p> Hello. </p>` `<span> Goodbye. </span>`

4. Give a short section of HTML and draw a circle around the part selected by the following selector:

   `div > p{ color : red }`

   `<div> Hello.` `<p> Goodbye. </p>` `</div>`

5. Describe briefly the effect of changing an object's z-index.

   Overlapping objects with a higher z-index appear in front of objects with a lower z-index.

6. Describe briefly the difference between `name` and `id` attributes in elements in a form.

   `name` is used when a form is submitted to a server. `id` is used by style selectors and by the Javascript `getElementById` function.

7. Describe briefly what will happen when the button labelled Click Me! is clicked.

```
<button type="button"
         onclick='this.innerHTML = "Boo!"'>
Click Me!
</button>
```

   The text on the button will change to "Boo!"

8. Describe briefly what will happen when the button labelled Click Me! is clicked.

```
<button type="button"
        onclick='window.alert("Boo!")'>
Click Me!
</button>
```

   A panel, separate from the webpage, will open, with the text "Boo!" on it.

9. Describe briefly what will happen when the button labelled Click Me! is clicked.

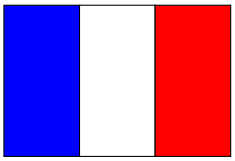
```
<button type="button"
        onclick='document.write( "Boo!")'>
  Click Me!
</button>
```

   The *entire web page* will have its contents replace with "Boo!"

10. Write an image tag that will display the image at the URL `snowfall.jpg`, but if the user is using a screen reader will read the text `Snowfall in Vermont`.

```
<img src="snowfall.jpg" alt="Snowfall in Vermont">
```

11. Write the HTML and CSS for a web page that just looks like the French flag (shown at right), where the entire flag has dimensions 300px by 200px. Do not use absolute positioning; instead use floated `divs`.



```
<!DOCTYPE html>
<html>
  <head>
    <style>
      .flagpart {
          width : 100px;
          height : 200px;
          float : left;
      }
      #red { background-color : red; }
      #white { background-color : white; }
      #blue { background-color : blue; }
    </style>
  <body>
    <div id="red" class="flagpart"></div>
    <div id="white" class="flagpart"></div>
    <div id="blue" class="flagpart"></div>
  </body>
</html>
```

12. Rewrite the code below to use an internal style sheet instead of inline styling.

```
<!DOCTYPE html>
<html>
<body>
<p style="color:red">  This is red paragraph.</p>
<p style="color:green"> This is green paragraph.</p>
</body>
</html>
```

```
<!DOCTYPE html>
<html>
<head>
<style>
p.redclass { color : "red" ; }
p.greenclass { color : "green" ; }
</style>
</head>
<body>
<p class="redclass">  This is red paragraph.</p>
<p class="greenclass"> This is green paragraph.</p>
</body>
</html>
```

13. Rewrite the code below to use a Javascript script instead of a style sheet.

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      #monkey { position : absolute;   top : 30px;   left : 30px;  }
    </style>
  </head>
  <body>
    <p>  <span id="monkey">   <img src="monkey.jpg">  </span> </p>
  </body>
</html>
```

```
<!DOCTYPE html>
<html>
  <body>
    <p>  <span id="monkey">   <img src="monkey.jpg">  </span> </p>
    <script>
    var monkey = document.getElementById("monkey");
    monkey.style.position = "absolute";
    monkey.style.top = "30px";
    monkey.style.left = "30px";
    </script>
  </body>
</html>
```

14. On the HTML page below, the user can enter a price in the "Price" box and a quantity in the "Quantity" box. When the user clicks the "Calculate" button, the price is multiplied by the quantity, the result of this is reduced by 15%, and the final result is shown in the "Discount price" h2 header.

    Write the javascript code to accomplish this.

```
<!DOCTYPE html>
  <head>
    <script>
    //  Your code goes here.
    function calcDiscount() {
    var price = document.getElementById('price').value;
    var quantity = document.getElementById('quantity').value;
    var result = .85*(price * quantity);
    document.getElementById('discount').innerHTML = result;
    }
    </script>
  </head>
  <body>
    <h1> 15% Off T-shirt Calculator! </h1>
    <form name="calc" id="calc">
      <label> Price: $<input type="text" name="price" id="price"></label>
      <label> Quantity: <input type="text" name="quantity" id="quantity"> </label>
      <button type="button" id="mybutton" onclick="calcDiscount()">
        Calculate
      </button>
    </form>
    <h2>Discount price: $ <span id="discount"> </span> </h2>
```

```
  </body>
</html>
```