Assignment 1

Question 1

HTML

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Assignment 1 - Question 1</title>
    <link href="ass1_q1.css" rel="stylesheet">
</head>
<body>
    <div class="container">
        <script type="text/javascript" language="javascript" src="ass1_q1.js">
        </script>
    </div>
</body>
</html>
```

CSS

```css
.container{
    border: 3px solid black;
    width: 31rem;
    padding: 0 1em 1em 1em;
}
```

JAVASCRIPT

```javascript
//define books and authors
var books = [
    { title: "Data Structures and Algorithm Analysis in C++",
      publisher: "Pearson",
      authors: [
       {firstName: "Mark", lastName: "Weiss" }]
      },

    { title: "Foundations of Finance",
      publisher: "Pearson",
      authors: [
       {firstName: "Arthur", lastName: "Keown" },
       {firstName: "John", lastName: "Martin" }]
      },

    { title: "Literature for Composition",
      publisher: "Longman",
      authors: [
       {firstName: "Sylvan", lastName: "Barnet" },
       {firstName: "William", lastName: "Cain" },
       {firstName: "William", lastName: "Burto" }]
      }
 ];

function outputBooks() {
  //add 'let' so that each scope has it's own variable
    for (let i=0; i<books.length; i++) {
        document.write("<h2>" + books[i].title + "</h2>");
        document.write("<strong>" + books[i].publisher + "</strong>"+ "<br>" + "<b
r>");
        outputAuthors(books[i]);
    }

 function outputAuthors(book) {
    for (let i=0; i<book.authors.length; i++) {
      document.write("Author's Name: ");
      document.write(book.authors[i].firstName + ' ' + book.authors[i].lastName +
 "<br>");


    }
 }
}
 outputBooks();
```

Question 2

HTML

```html
<html lang="en">

<head>
    <meta charset="utf-8" />
    <meta name="viewport" content="initial-scale=1.0,maximum-scale=1.0,width=device-width">

    <title>Assignment 1 - Question 2 </title>
    <link href="ass1_q2.css" rel="stylesheet" />
    <script src="ass1_q2_data.js" type="text/JavaScript"></script>
    <script src="ass1_q2_functions.js" type="text/JavaScript"></script>
</head>

<body>
    <div class="title">
        <h1>Shopping Cart</h1>
    </div>
    <table class="table-fill">
        <thead>
            <tr>
                <th colspan="2">Product</th>
                <th>#</th>
                <th>Price</th>
                <th>Amount</th>
            </tr>
        </thead>
        <tbody>
            <script src="ass1_q2_start.js"></script>
        </tbody>
    </table>
</body>

</html>
```

CSS

There was no change in CSS.

JAVASCRIPT

FILE: ass1_q2_functions.js

```javascript
/* define functions here */

function outputCartRow(file, title, quantity, price, total) {
    document.write('<tr>');
    document.write('<td><img src="img/' + file + '"></td>');
    document.write('<td>' + title + '</td>');
    document.write('<td>' + quantity + '</td>');
    document.write('<td>$' + price.toFixed(2) + '</td>');
    document.write('<td>$' + total.toFixed(2) + '</td>');
    document.write('</tr>');
}

function calculateTotal(quantity, price) {
    return quantity * price;
}

function calcualteSubtotal(quantities, prices) {
    var subtotal = 0;
    for (var i = 0; i < quantities.length; i++) {
        subtotal = subtotal + calculateTotal(quantities[i],prices[i]);
    }
    return subtotal;
}

function calculateTax(subtotal) {
    return subtotal * .1;
}

function calculateShipping(subtotal) {
    return subtotal > 1000 ? 0 : 40;
}

function calculateGrandTotal(subtotal, tax, shipping) {
    return subtotal + tax + shipping;
}
```

FILE: ass1_q2_start.js

```javascript
/* add loop and other code here ... in this simple exercise we are not
   going to concern ourselves with minimizing globals, etc */

   for (var i = 0; i < 3; i++) {
       outputCartRow(filenames[i], titles[i], quantities[i], prices[i], calculateT
otal(quantities[i], prices[i]));
   }

   let subtotal = calcualteSubtotal(quantities, prices);
   let tax = calculateTax(subtotal);
   let shipping = calculateShipping(subtotal);
   let grandTotal = calculateGrandTotal(subtotal, tax, shipping);

   // subtotal row
   document.write('<tr class="totals">');
   document.write('<td colspan="4">Subtotal</td>');
   document.write('<td>$' + subtotal.toFixed(2) + '</td>');
   document.write('</tr>');

   // tax row
   document.write('<tr class="totals">');
   document.write('<td colspan="4">Tax</td>');
   document.write('<td>$' + tax.toFixed(2) + '</td>');
   document.write('</tr>');

   // shipping row
   document.write('<tr class="totals">');
   document.write('<td colspan="4">Shipping</td>');
   document.write('<td>$' + shipping.toFixed(2) + '</td>');
   document.write('</tr>');

   // grand total row
   document.write('<tr class="totals focus">');
   document.write('<td colspan="4">Grand Total</td>');
   document.write('<td>$' + grandTotal.toFixed(2) + '</td>');
   document.write('</tr>');
```

NOTE: I have all of my code on GitHub: https://github.com/jrank1/IC215-Assignment-1.git