HW05 asks you to create a web page that looks like the page shown below, looking much like a restaurant bill. This is an extension of our in-class exercises Mon & Wed 9/21–9/23, and is due by class time on Fri 9/25/2015 via email attachment.

Note carefully the many components of the final page you're being asked to produce, including:

- 9 text-input boxes allowing the user to enter the number of items, the price of each item, and the tip percentage;

- a "Calculate" button that produces the totals along each row, the sub-total, the tip, and the grand-total.

- specific formatting using bold and italic style tags and often right-aligned text.

My Favorite Place To Eat!

**1234 Main Street
Hometown, TN**

ITEM	# of items	×	cost per item ($)	= *TOTAL*
Appetizers	2	×	7	= 14.00
Drinks	4	×	3	= 12.00
Entrees	2	×	10	= 20.00
Desserts	2	×	5	= 10.00
			Sub-Total =	56.00
	15	%	*Tip* =	8.40
			Grand-Total =	64.40

[Calculate]

Specific Instructions:

Warning: I have found that when editing JavaSscript, the browser window will often not "update" to show my work unless I re-open the document (instead of just refreshing the browser window). Several of you have had some similar frustrations — so just be aware that we sometimes have to re-open the file in the browser instead of just refreshing. Some Googling around suggests also that in FireFox holding down the SHIFT key when refreshing will solve the problem.

(1) On the CS 101 course Blackboard site, navigate to the Graded HW Assign's page, and then down to the HW05 entry, and download the file linked there named

```
HW05(RestaurantBill)Template.html
```

(2) Open the downloaded document in your text editor, and then also open the downloaded file from within your <u>browser</u> and observe the results. (Be sure you have opened the *downloaded* file you are editing, and not some other copy.)

Your browser page should look like that shown at right. Verify that the "Calculate" button updates the total for the *Appetizers* row and the *Sub-Total* and sets the *Grand-Total* to 100.00.

My Favorite Place To Eat!

**1234 Main Street
Hometown, TN**

ITEM	# of items	×	cost per item ($)	= *TOTAL*
Appetizers	2	×	7	= 14.00
Drinks	4	×	3	= 0.00
			Sub-Total =	14.00
	15	%	*Tip* =	0.00
			Grand-Total =	100.00

[Calculate]

(3) Your goal is to transform the template web page into the complete and functional page shown at the beginning of this document by editing the underlying html code of the template document, using the partially-completed template code as a guide. Judicious and careful copying-and-pasting will definitely be your friend in this task. Make use of well-named variables at each stage of the process.

(4) Your final html document should be named HW05Lastname.html and should be submitted via email attachment to hcraft@sewanee.edu.

Further Step-by-Step Instructions and Hints

(5) Begin by saving/renaming the file correctly as HW05Lastname.html and making sure you have that same newly-named file open in your browser.

(6) Update the information/comments at the top of the html file, providing an accurate file name, author, etc.

(7) Review the code carefully before starting to change anything — make sure you understand what the code is already doing and how it is doing it. Notice, for example, that the billing information is embedded in a <Table> structure and that some blank <tr> rows are already provided for you. Notice also that there are comments embedded in the code to help you stay organized.

(8) Use the *Appetizers* row as a model for modifying the *Drinks* row.

(9) Use the *Appetizers* calculations within the Calculate button as a model for creating/inserting calculations in the button for the *Drinks* row.

(10) Use your experience with the *Appetizers* and *Drinks* rows to then add the content and calculations for the *Entrees* and *Desserts* rows.

(11) Update the *subTotal* calculation in the button and check your page for errors.

(12) Replace the "hard-coded" 15 in the *Tip* row with an input text box.

(13) Add code to the *Tip* calculations in the button so that you "grab" the user-provided *Tip* value and save it into a well-named variable.

(14) Add some code to the button to get the *tipTotal* to show up in the correct place on the web page.

(15) Update the button's *grandTotal* calculation.

Hints:

• *Make small changes at a time, save, and refresh your browser window to quickly catch problems as you go.*

• *Copying and pasting is your friend! But even good friends need some TLC: don't forget to modify the critical pieces of your copy-and-pasted code.*

• *Be creative in tracking down bugs and errors. Find a way to let the* page *give you information about the problem. For example, if you can't get the page to show the correct calculated dollar value somewhere, try having it print a text string like* Hello! *there instead — if the text shows up but your calculated number does not, that will tell you where to look for a problem. If the text won't show up either, that suggests other places to look for the problem.*

• *Remember you might have to occasionally re-open the file in your browser instead of simply refreshing it. In FireFox, holding down the* shift *key while refreshing will often accomplish this same thing.*

• *Small amounts of extra credit awarded for creativity, organization, etc.*