INFO1-CE9224 Lab Assignments

You're not responsible for turning these assignments in. They are for your own benefit so that you can learn in class and I can help you as you go. Choose whichever assignments you'd like in any order.

If you have any questions, please feel free to ask during the lab.

Exercise

Looping: Write a script that counts from 1 to 10 in steps of 1. For each number print whether it's even or odd.

Multidimensional Arrays: Create an indexed multidimensional array with the following data and the loop over it printing out the keys (city name) in bold and the values next to it. Separate each city by two lines:

city: New York
nickname: The Big Apple
population: 8391881
size: 468.48 sq mi

city: Chicago
nickname: The Windy City
population: 2853114
size: 234.0 sq mi

city: Los Angeles
nickname: L.A.
population: 9830420
size: 502.693 sq mi

Now create an associative array using the city name as the key where the value will be an array with the remaining data. Loop over it and print it out so that it looks the same as the output from the first version of this exercise.

Assignment #1

Class review: looping, user defined functions, and multi-dimensional array basics

See the following file:
http://davehauenstein.com/nyu/INFO1-CE9224-2012-Summer/labs/class4/a1Output.txt

This file defines HTML that is the expected output. Please meet the following criteria:

1. Define a multidimensional array where the keys are the top level navigation, and the values are arrays that define second level navigation.
2. Define a function that takes in the array from step 1, and **returns** the navigation as an HTML formatted string.

There are many ways to solve this problem. If you get done with this, and you feel like there may be a better way, let me know. I can help you architect the solution until you feel happy with it.

Hint: If you're having a hard time getting started, see the following URL for the array that I've started for you. Add the remaining values yourself, and use that. Here's the hint: http://davehauenstein.com/nyu/INFO1-CE9224-2012-Summer/labs/class4/a1Hint.txt

Advanced: User defined functions and loops are great, but what if this problem had an unknown number of nested levels of navigation? Do you need a nested loop for each nesting in the multidimensional array? The solution to this problem is advanced, and it's called recursion. A recursive function calls itself inside of a loop until a particular condition is met.

If you finish the lab early, and would like to work on this, let me know and I can get you started.

Assignment #2

Putting it all together: what we've learned in class up to now

See this url to obtain the form for the assignment: http://davehauenstein.com/nyu/INFO1-CE9224-2012-Summer/labs/class4/a2Template.txt. You'll notice that it's very similar to the form that was used last week in class. For this assignment, please write code to do the following:

1. Create 2 user defined functions:
    a. one for generating the HTML for text inputs
    b. one for generating the HTML for textarea inputs
2. Each of these functions should take in the following arguments:
    a. label: the text for the label
    b. name: the name attribute of the field
    c. id: the id attribute of the field
    d. value: a default value, this should be optional
3. Create a multidimensional array that contains the data for generating this form.
    a. Loop over the multidimensional array
    b. Call the appropriate form function to generate the HTML
4. **Note**: The functions should return the html, not echo it.
5. When handling the form, don't print out each field individually. Do the following:
    a. Write a loop to iterate over the $_POST array.
    b. Replace the underscores in the keys with spaces, and make sure the keys have uppercase first letters.
    c. Display the value after the key, for example
        i. the form field is named: product_description
        ii. it should display: Product Descriptions: *value here*
6. If it's a POST request, do not display the form again, only the values.
7. Ensure that there are no errors or warnings.

Please let me know if you have any questions or these instructions are unclear.