

**Midterm Exam**  
Wednesday 2/26/2013

Name \_\_\_\_\_

A few things before we start...

1. You are allowed a two-sided, one-page crib.
2. You may not use your textbooks, notes or any other materials.
3. You may not use your cell phone. If you have to leave the room, you may not take your cell phone with you.
4. You may not use a calculator.
5. Read each question carefully and write your answer in the place indicated.
6. Don't cheat.
7. Close your html tags, be careful with quotes, be careful with open and close php tags.

Indent your php and html to make the purpose clear. Make sure you open and close {}.  
Good luck.



*"On the Internet, nobody knows you're a dog."*

**Part I. HTML** [15 points] Below is are portions of webpages. Write HTML for the pieces indicated.

|  |   |
|--|---|
|  <p>ASSESSMENT : 100 POINTS</p> <p><b>contiguity</b> means :</p> <ul style="list-style-type: none"> <li><input type="radio"/> the property of two things happening at the same time</li> <li><input type="radio"/> the beginning, development, or unfolding of a thing</li> <li><input type="radio"/> the attribute of being so near as to be touching</li> <li><input type="radio"/> the action of lessening in severity or intensity</li> </ul> <p>Not sure? Get a hint: 50/50 Word in the Wild</p>  | <p>A. From vocabulary.com. Write the HTML for the four input buttons indicated by the arrow. Name the input control “def”. You only have to write the first two words of each definition.</p> |
|  <p><b>Babies Laughing At Dogs Supercute</b></p> <p>More like <i>supercute</i>.</p> <p>Reddit Alien 6 hours ago 48 responses</p>   | <p>B. From buzzfeed.com. Write the HTML to include the image. Assume the image is in <code>laughing.png</code>.</p>   |
|  <p><b>Latest NASA Blog Updates</b></p> <p>Fermi 1 day ago<br/>Extreme Astrophysics as Food</p> <p>NASA Deputy Administrator's Blog 1 day ago<br/>NASA Supports American Manufacturing</p> <p>NASA Education Express 1 day ago<br/>NASA Education Express -- Feb. 21, 2013</p> <p>View All NASA Blogs</p>   | <p>C. From NASA.gov. Write the HTML for the button indicated. Assume the control name is <i>viewall</i>.</p>  |
|  <p><b>MOST POPULAR</b></p> <ol style="list-style-type: none"> <li>1 How Many Ph.D.'s Actually Get to Become College Professors?</li> <li>2 The Ph.D Bust: America's Awful Market for Young Scientists—in 7 Charts</li> <li>3 After 50 Years, the Voting Rights Act's Biggest Threat: The Supreme Court</li> <li>4 59% of the 'Tuna' Americans Eat Is Not Tuna</li> <li>5 The Tunnels of NYC's East Side Access Project</li> <li>6 The Hanging</li> <li>7 There's More to Life Than Being Happy</li> <li>8 Anthropology Inc.</li> <li>9 DIY Weapons of the Syrian Rebels</li> <li>10 Will We Learn Anything from Afghanistan? William R. Polk, Part 1</li> </ol> | <p>D. From theatlantic.com. Write the HTML for the numbered list. Don't worry about fonts or emphasis. You only have to write the first two words of each list item.</p>                      |
|  <p><b>Podcasts &amp; Vodcasts</b></p> <p>This Week @ NASA, February 22, 2013</p> <p>&gt; More Podcasts &amp; Vodcasts</p>   | <p>E. From NASA.gov. Write the HTML for the link indicated. Assume the url is <i>vodpod.html</i></p>  |

## Part II. PHP Conditionals, Arrays, Loops, Functions. [14 points]

Consider the following variables and arrays.

```
$datastring = "12,45,36,99,43,67,2";  
$distance = 3.1;  
$base = 2.6;  
$teams = array ('Boston'    => 'Red Sox',  
                'Chicago'   => 'Cubs',  
                'Detroit'   => 'Tigers',  
                'Hurricanes' => 'Miami');
```

Part A. For each question below, show the output that would result (what the user would see in the browser window) as a result of PHP execution of the fragment shown. Be careful. Look closely at the details.

|   | Fragment (2 points each)  | Output |
|---|---|--------|
| 1 | <pre>&lt;?php<br/>\$scores = explode(",", \$datastring);<br/>echo "Data[2] is ". \$scores[2];<br/>?&gt;</pre>   |        |
| 2 | <pre>&lt;?php<br/>\$units = ceil(\$distance * 7);<br/>\$fare = \$base + ((\$units - 1.0) * 0.4);<br/>echo "Fare is \$fare";<br/>?&gt;</pre>   |        |
| 3 | <pre>&lt;?php<br/>\$new=array();<br/>\$i=1;<br/>foreach (\$teams as \$key=&gt;\$value) {<br/>    \$new[\$i] = \$key;<br/>    \$i++;<br/>}<br/>echo "I like the &lt;br&gt;". \$new[2];<br/>?&gt;</pre> |        |

Part B. Write a php function called findmin. Findmin has one argument: an array of numbers. Findmin returns the smallest value in the array. Here is an example call. (4 points)

```
$scores = array(12,4,56,99,34,42);  
$smallest = findmin($scores);
```

Part C. Write a function with two arguments: an array of strings and name. Here is an example call the the function.

```
$fruits = array("apple", "orange", "banana", "grapefruit", "kiwi", "mango");  
$name = "fruits";  
make_checkboxes($name, $fruits);
```

The function should output html to create a checkbox for each array element. The GET (or POST) variable created by the input control should be an array indicated by the function argument name. Don't worry about making the check boxes sticky. (4 points)

**Please turn the page.**

### Part III – Complete PHP Script [20 points]

Consider the web page shown on the right. This page is used to calculate how many tables of the selected type are needed for a function. The page was produced by the incomplete html/php below and the xml is shown too. **Note that the inputs are sticky.**

For your party with 99 guests...

There are 8 seats per 60 inch Round Table.  
You will need 13 tables.

Let me find how many tables you need!

How many guests?

What kind of table?

|   |   |
|---|---|
| <pre>&lt;? \$xml = new SimpleXMLElement( file_get_contents("rental.xml")); ?&gt; &lt;!DOCTYPE html&gt; &lt;html&gt; &lt;head&gt;   &lt;title&gt;Rentals&lt;/title&gt;   &lt;style&gt;     body{       font-family: arial;     }   &lt;/style&gt; &lt;/head&gt; &lt;body&gt; &lt;?php if (isset(\$_GET['submitted']))     handleform(\$xml); displayform(\$xml); ?&gt; &lt;/body&gt; &lt;/html&gt; &lt;?php function handleform(\$xml){     // You write this } function displayform(\$xml){     // You write this } function makeMenu(\$menuname, \$xml){     // You write this } ?&gt;</pre> | <pre>&lt;rentals&gt; &lt;table id="1"&gt;   &lt;description&gt;36 inch Round Table&lt;/description&gt;   &lt;maxseating&gt;4&lt;/maxseating&gt; &lt;/table&gt; &lt;table id="2"&gt;   &lt;description&gt;48 inch Round Table&lt;/description&gt;   &lt;maxseating&gt;6&lt;/maxseating&gt; &lt;/table&gt; &lt;table id="3"&gt;   &lt;description&gt;60 inch Round Table&lt;/description&gt;   &lt;maxseating&gt;8&lt;/maxseating&gt; &lt;/table&gt; &lt;table id="4"&gt;   &lt;description&gt;72 inch Round Table&lt;/description&gt;   &lt;maxseating&gt;8&lt;/maxseating&gt; &lt;/table&gt; &lt;table id="5"&gt;   &lt;description&gt;6 ft x18 inch Conference&lt;/description&gt;   &lt;maxseating&gt;3&lt;/maxseating&gt; &lt;/table&gt; &lt;table id="6"&gt;   &lt;description&gt;8 ft x 18 inch Conference&lt;/description&gt;   &lt;maxseating&gt;4&lt;/maxseating&gt; &lt;/table&gt; &lt;table id="7"&gt;   &lt;description&gt;Card Table 30 inch x 30 inch&lt;/description&gt;   &lt;maxseating&gt;4&lt;/maxseating&gt; &lt;/table&gt; &lt;/rentals&gt;</pre> |
|---|---|

Complete the missing functions on the next page. Note that your function displayform() should call your function makeMenu().

Complete the two functions `displayform($xml)` and `handleform($xml)`. Write a separate function in `makeMenu($menuname, $xml)` to display the selection menu.

```
function handleform($xml) {
```

```
function displayform($xml){  
/* Remember to write a separate function makeMenu to create the table menu */
```