

Instructions for IT202-M2-PHP (pts. 10.00)

Make sure you have the dev/prod branches created before starting this assignment. Setup steps:

```
git checkout dev
git pull origin dev
git checkout -b M2-PHP-HW
```

You'll have 3 problems to save for this assignment.

Each problem you're given a template. **Do not edit anything in the template except where the commands tell you to.**

You'll copy each template into their own **separate .php files**, immediately **git add**, **git commit** these files (you can do it together) so we can capture the difference/changes between the templates and your additions. This part is required for full credit.

Homework Steps:

1. Open VS Code at the root of your repository
2. In VS Code create a new folder/directory at the same level as the lib and partial directories.
Call it **M2**
3. Download the 3 php files from Canvas (**problem1.php, problem2.php, problem3.php**)
4. Copy them into the **M2** folder/directory
5. **git add .**
6. **git commit -m "adding template baselines"**
7. Do the related work (you may do steps 8 & 9 as often as needed or you can do it all at once at the end)

Hint: start your local server with: **php -S localhost:3000 -t .**

then open the browser and use the URL (substituting the correct number for the #):

<http://localhost:3000/M2/problem#.php>

8. **git add .**
9. **git commit -m "completed hw2"**
10. When you're done push the branch
git push origin M2-PHP-HW
11. Go to github and create a zip file from the **M2-PHP-HW** branch.
12. Unzip the file on your local machine
13. Drag and drop the **M2** folder to your **\$HOME/public_html/ucid-dev** folder
14. After deploys test it out by opening a browser and using the correct URL (substituting your ucid and the correct number for the #):
<https://web.njit.edu/~ucid/ucid-dev/M2/problem#.php>
15. Update the URL to check that each problem file displays properly

16. In github, create the **Pull Request** with **dev** as base and **M2-PHP-HW** as compare
17. Fill out the below deliverable items, save the submission as **m2_submission.pdf**
18. add/commit/push the pdf file:

```
git add m2_submission.pdf  
git commit -m "adding submission file"  
git push origin M2-PHP-HW
```
19. Complete the pull request from step 16.
You can delete the **M2-PHP-HW** branch
20. Create a new **pull request** with **prod** as base and **dev** as compare
21. Immediately create/merge/confirm this just to deploy it to prod and you don't need to adjust anything during this step
22. On your local machine sync the changes

```
git checkout dev  
git pull origin dev  
git branch -D M2-PHP-HW
```
23. Submit the link to the **m2_submission.pdf** file from the prod branch to Canvas

Fill in the below Deliverables

Deliverable 1: Problem 1: Only output Odd values of the Array under “Odds output” (pts. 2.5)

Sub-Task 1: Clearly screenshot the output of Problem 1 showing the data and the code output in the proper part of the page

Make sure if the screenshot contains code that you have a relevant comment with your ucid, date, and explanation of what you're attempting, if not maximum grade for this item is 75%. Add a caption explaining what you're showing in the screenshot (required for fullcredit)

Problem 1: Divisible By 3 Output

a1	a2	a3	a4
Processing Array: <pre>array (0 => 0, 1 => 1, 2 => 2, 3 => 3, 4 => 4, 5 => 5, 6 => 6, 7 => 7, 8 => 8, 9 => 9, 10 => 10, 11 => 11, 12 => 12, 13 => 13, 14 => 14, 15 => 15,)</pre>	Processing Array: <pre>array (0 => -3, 1 => -2, 2 => -1, 3 => 0, 4 => 1, 5 => 2, 6 => 3, 7 => 4, 8 => 5, 9 => 6, 10 => 7, 11 => 8, 12 => 9, 13 => 10,)</pre>	Processing Array: <pre>array (0 => 15, 1 => 14, 2 => 13, 3 => 12, 4 => 11, 5 => 10, 6 => 9, 7 => 8, 8 => 7, 9 => 6, 10 => 5, 11 => 4, 12 => 3, 13 => 2, 14 => 1, 15 => 0,)</pre>	Processing Array: <pre>array (0 => 0, 1 => 0, 2 => 1, 3 => 1, 4 => 2, 5 => 2, 6 => 3, 7 => 3, 8 => 4, 9 => 4, 10 => 5, 11 => 5, 12 => 6, 13 => 6, 14 => 7, 15 => 7, 16 => 8, 17 => 8, 18 => 9, 19 => 9, 20 => 10, 21 => 10,)</pre>
Divisible By 3 Output:	Divisible By 3 Output:	Divisible By 3 Output:	Divisible By 3 Output:
0	-3	15	0
3	0	12	0
6	3	9	3
9	6	6	3
12	9	3	6
15		0	6
			9
			9

What the screenshot shows is problem 1 of the homework assignment, where we needed to go through an array and check what items within were divisible by 3. The output is where my answer is.

Sub-Task 2: Describe how you solved the problem

I solved the problem by looping through the array and for each index I checked if %3==0, if that was true I echoed it with a break so that it wouldn't get cluttered. I would have ignored zeros in this but after googling it, apparently 0 is divisible by every number, so I left them in.

Deliverable 2: Problem2: Only output the sum/total of the array values by assigning it to the \$total variable (the number must end in 2 decimal places. For extra credit, if it ends in 1 decimal place, ensure there is a 0 at the end (pts. 2.5)

Sub-Task 1: Clearly screenshot the output of Problem 2 showing the data and the code output in the proper part of the page

Make sure if the screenshot contains code that you have a relevant comment with your ucid, date, and explanation of what you're attempting, if not maximum grade for this item is 75%. Add a caption explaining what you're showing in the screenshot (required for full credit)

Problem 2: Sum the values and display the total

A1	A2	A3	A4
<pre>Processing Array: array (0 => 10.000999999999999, 1 => 11.101000000000001, 2 => 0.01099999999999999, 3 => 3.991000000000001, 4 => 16.120999999999999, 5 => 8.131000000000002, 6 => 100.23099999999999, 7 => 1.000999999999999,)</pre> <p>The total is '150.59'</p>	<pre>Processing Array: array (0 => 1.99, 1 => 1.99, 2 => 0.989999999999999, 3 => 1.973000000000001, 4 => 0.989999999999999, 5 => 1.909999999999999, 6 => 0.910000000000003, 7 => 0.989999999999999,)</pre> <p>The total is '11.74'</p>	<pre>Processing Array: array (0 => 0.01, 1 => 0.01, 2 => 0.01, 3 => 0.01, 4 => 0.01, 5 => 0.01, 6 => 0.01, 7 => 0.01, 8 => 0.01, 9 => 1.01,)</pre> <p>The total is '1.10'</p>	<pre>Processing Array: array (0 => 10.01, 1 => -12.220000000000001, 2 => 0.230000000000001, 3 => 29.19999999999999, 4 => -5.129999999999999, 5 => 2.120000000000001,)</pre> <p>The total is '24.21'</p>

What the screenshot shows is my answer for problem 2, extra credit included. We were to go through the array and total the number, only leaving 2 decimal places.

Sub-Task 2: Describe how you solved the problem

I solved the problem by looping through the array and adding each of the indexes to the running \$total variable. After the for loop I shaved off the decimals by using a number_format() command which allows you to state the amount of decimal places a float value has.

Deliverable 3: Problem3: Output only those array items that can be used as positive number, even if it is in quotes (pts. 2.5)

Sub-Task 1: Clearly screenshot the output of Problem 3 showing the data and the code

output in the proper part of the page

Make sure if the screenshot contains code that you have a relevant comment with your ucid, date, and explanation of what you're attempting, if not maximum grade for this item is 75%. Add a caption explaining what you're showing in the screenshot (required for full credit)

Problem 3: Be Positive

A1	B2	C3	D4
<pre>Processing Array: array (0 => -1, 1 => -2, 2 => -3, 3 => -4, 4 => -5, 5 => -6, 6 => -7, 7 => -8, 8 => -9, 9 => -10,)</pre>	<pre>Processing Array: array (0 => -1, 1 => 1, 2 => -2, 3 => 2, 4 => 3, 5 => -3, 6 => -4, 7 => 115,)</pre>	<pre>Processing Array: array (0 => -0.029999999999999999, 1 => 0.00020000000000000001, 2 => -0.11,)</pre>	<pre>Processing Array: array (0 => '-1', 1 => 'hello', 2 => '2', 3 => '-3', 4 => '-4', 5 => '5', 6 => '-6', 7 => '6', 8 => '-7', 9 => '71', 10 => '71', 11 => 'a',)</pre>
<pre>Positive Output 1 2 3 115</pre>	<pre>Positive Output 1 2 3 115</pre>	<pre>Positive Output 0.0002</pre>	<pre>Positive Output 2 5 6 71 71</pre>

What I am showing in this screenshot is the answers to problem 3, where we sorted through an array to find the positive values, even if they were in string form. My answers are below the 'Positive Output' text.

Sub-Task 2: Describe how you solved the problem

I solved this problem by first creating a for loop to go through the array. Next I used an if statement to see if the value of the index was greater than 0, I used the floatval() method in order to convert the string floats into proper floats, which also happened to ignore anything out of place, such as the "hello" string. If the value was indeed greater than 0, I echoed it.

Deliverable 4: Misc Items (pts. 2.5)

Sub-Task 1: Add the prod URL for Problem1.php (remember you can assume this based

on how the domain gets built (i.e.,

<https://web.njit.edu/~mws36/mws36-dev/M2/problem1.php>)

Sub-Task 2: Add the prod URL for Problem2.php (remember you can assume this based on how the domain gets built (i.e.,

<https://web.njit.edu/~mws36/mws36-dev/M2/problem2.php>)

Sub-Task 3: Add the prod URL for Problem3.php (remember you can assume this based on how the domain gets built (i.e.,

<https://web.njit.edu/~mws36/mws36-dev/M2/problem3.php>)

Sub-Task 4: Add the pull request URL for M2-PHP-HW to dev (it should end in /pull/#)

<https://github.com/MatthewSchmelz/IT202-007/pull/8>

Sub-Task 5: Talk about what you learned, any issues you had, how you resolved them.

I learned how to do some basic coding with PHP, which has proven to be quite interesting, I like seeing my code output on web pages, making it feel like it matters just a little more. I also learned how to create my njit webpage, even if that caused me a few hours of issues because I didn't understand how MobaXTerm worked and I was behind the class due to php issues. I resolved these issues by going through the presentations and then looking up a few youtube tutorials to help me get the basics a little more, all to realize how to log into the NJIT servers.