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 in 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

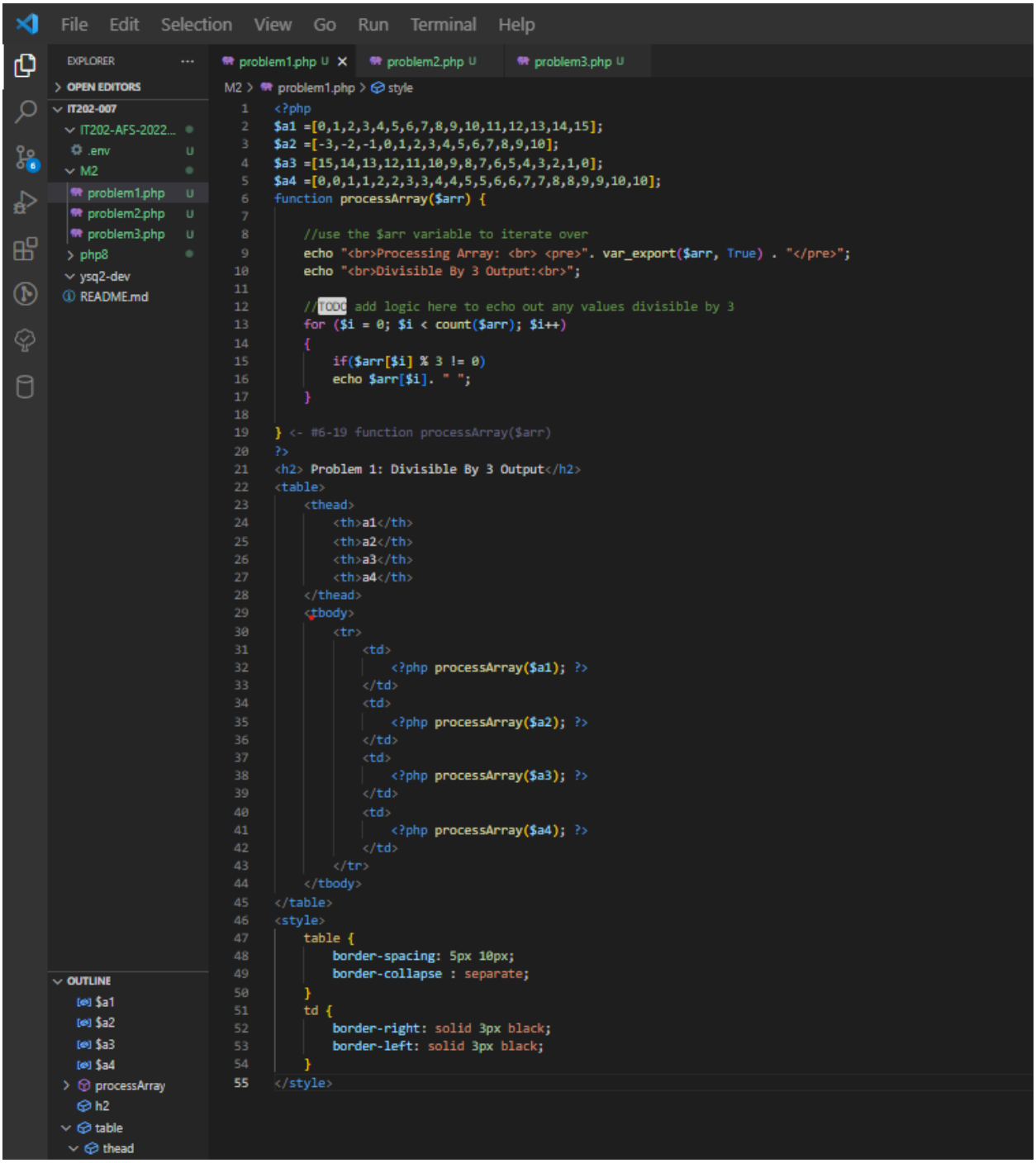
Fill in the below Deliverables

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 full credit)

CODE


File Edit Selection View Go Run Terminal Help
EXPLORER
problem1.php U
problem2.php U
problem3.php U
M2 > problem1.php > style
OPEN EDITORS
IT202-007
IT202-AFS-2022...
.env
M2
problem1.php
problem2.php
problem3.php
php8
ysq2-dev
README.md
OUTLINE
$a1
$a2
$a3
$a4
processArray
h2
table
thead
<?php
$a1 =[0,1,2,3,4,5,6,7,8,9,10,11,12,13,14,15];
$a2 =[-3,-2,-1,0,1,2,3,4,5,6,7,8,9,10];
$a3 =[15,14,13,12,11,10,9,8,7,6,5,4,3,2,1,0];
$a4 =[0,0,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10];
function processArray($arr) {
//use the $arr variable to iterate over
echo "
Processing Array:
 <pre>". var_export($arr, True) . "</pre>";
echo "
Divisible By 3 Output:
";
//TODO add logic here to echo out any values divisible by 3
for ($i = 0; $i < count($arr); $i++)
{
if($arr[$i] % 3 != 0)
echo $arr[$i]. " ";
}
} <- #6-19 function processArray($arr)
?>
<h2> Problem 1: Divisible By 3 Output</h2>
<table>
<thead>
<th>a1</th>
<th>a2</th>
<th>a3</th>
<th>a4</th>
</thead>
<tbody>
<tr>
<td>
<?php processArray($a1); ?>
</td>
<td>
<?php processArray($a2); ?>
</td>
<td>
<?php processArray($a3); ?>
</td>
<td>
<?php processArray($a4); ?>
</td>
</tr>
</tbody>
</table>
<style>
table {
border-spacing: 5px 10px;
border-collapse : separate;
}
td {
border-right: solid 3px black;
border-left: solid 3px black;
}
</style>

OUTPUT

Problem 1: Divisible By 3 Output

a1

Processing Array:

```
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,
)
```

Divisible By 3 Output:
1 2 4 5 7 8 10 11 13 14

a2

Processing Array:

```
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,
)
```

Divisible By 3 Output:
-2 -1 1 2 4 5 7 8 10

a3

Processing Array:

```
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,
)
```

Divisible By 3 Output:
14 13 11 10 8 7 5 4 2 1

a4

Processing Array:

```
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,
)
```

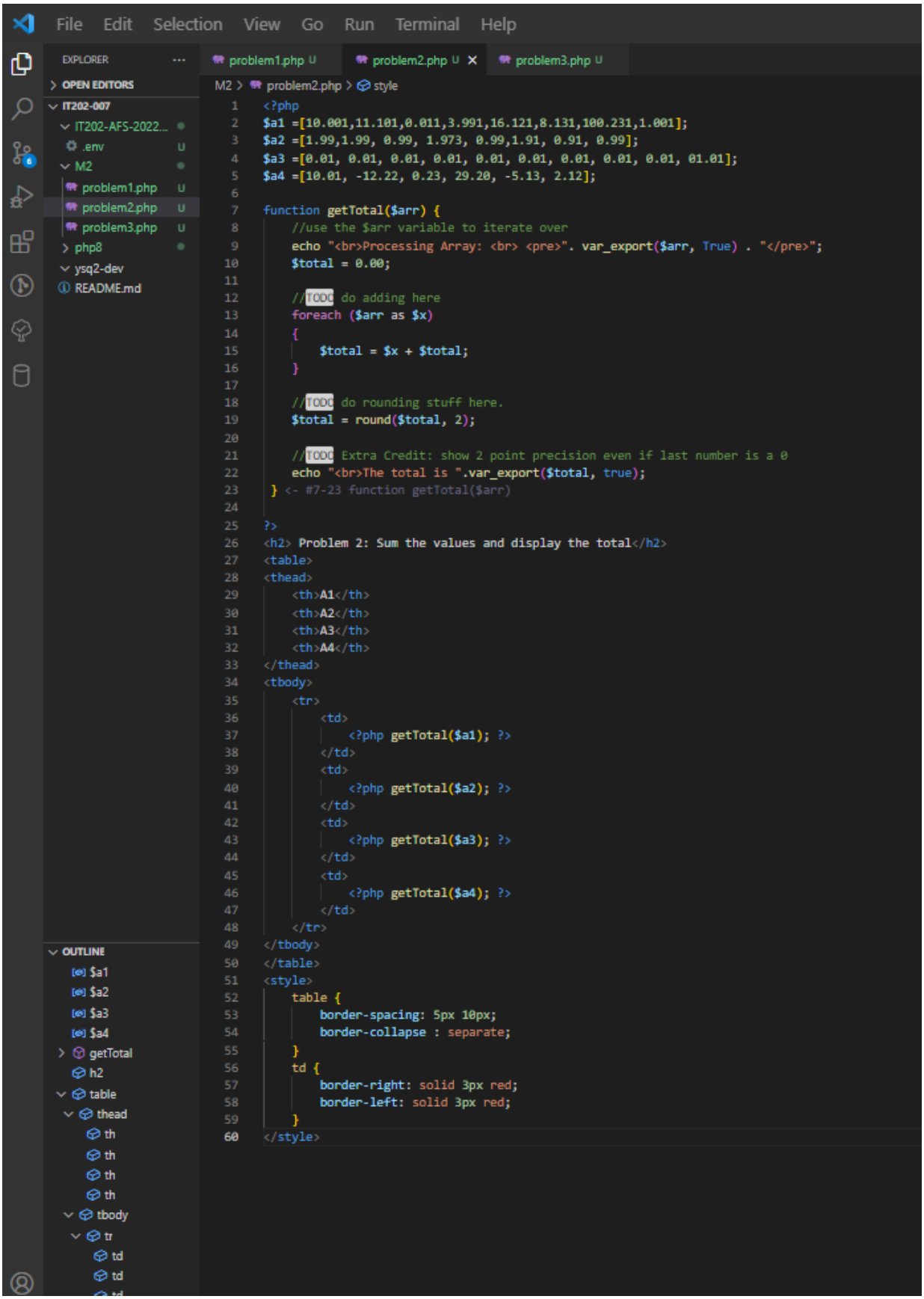
Divisible By 3 Output:
1 1 2 2 4 4 5 5 7 7 8 8 10 10

Sub-Task 2: Describe how you solved the problem
To solve the problem, what I did was that I used a for loop saying that if each number in the array is divisible by 3 and is odd, to echo it and display in the bottom section.

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%.

CODE


File Edit Selection View Go Run Terminal Help
EXPLORER
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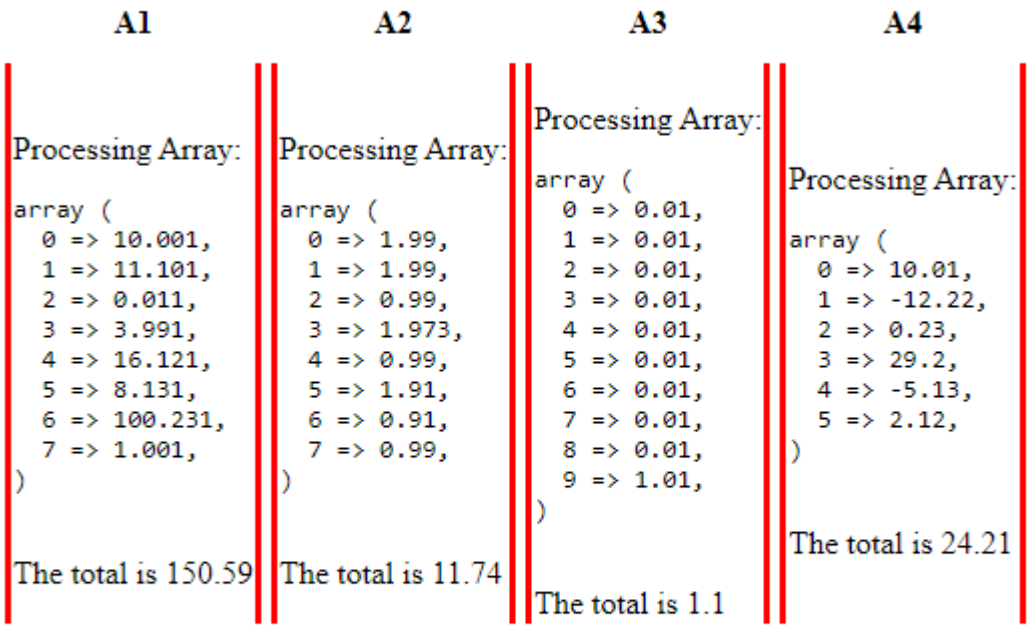
problem2.php U
problem3.php U
M2 > problem2.php > style
OPEN EDITORS
IT202-007
IT202-AFS-2022...
.env U
M2
problem1.php U
problem2.php U
problem3.php U
php8
ysq2-dev
README.md
OUTLINE
$a1
$a2
$a3
$a4
getTotal
h2
table
thead
th
th
th
th
tbody
tr
td
td
<?php
$a1 =[10.001,11.101,0.011,3.991,16.121,8.131,100.231,1.001];
$a2 =[1.99,1.99, 0.99, 1.973, 0.99,1.91, 0.91, 0.99];
$a3 =[0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 01.01];
$a4 =[10.01, -12.22, 0.23, 29.20, -5.13, 2.12];
function getTotal($arr) {
//use the $arr variable to iterate over
echo "
Processing Array:
 <pre>". var_export($arr, True) . "</pre>";
$total = 0.00;
//TODO do adding here
foreach ($arr as $x)
{
$total = $x + $total;
}
//TODO do rounding stuff here.
$total = round($total, 2);
//TODO Extra Credit: show 2 point precision even if last number is a 0
echo "
The total is ".var_export($total, true);
} <- #7-23 function getTotal($arr)
?>
<h2> Problem 2: Sum the values and display the total</h2>
<table>
<thead>
<th>A1</th>
<th>A2</th>
<th>A3</th>
<th>A4</th>
</thead>
<tbody>
<tr>
<td>
<?php getTotal($a1); ?>
</td>
<td>
<?php getTotal($a2); ?>
</td>
<td>
<?php getTotal($a3); ?>
</td>
<td>
<?php getTotal($a4); ?>
</td>
</tr>
</tbody>
</table>
<style>
table {
border-spacing: 5px 10px;
border-collapse : separate;
}
td {
border-right: solid 3px red;
border-left: solid 3px red;
}
</style>

OUTPUT

Problem 2: Sum the values and display the total



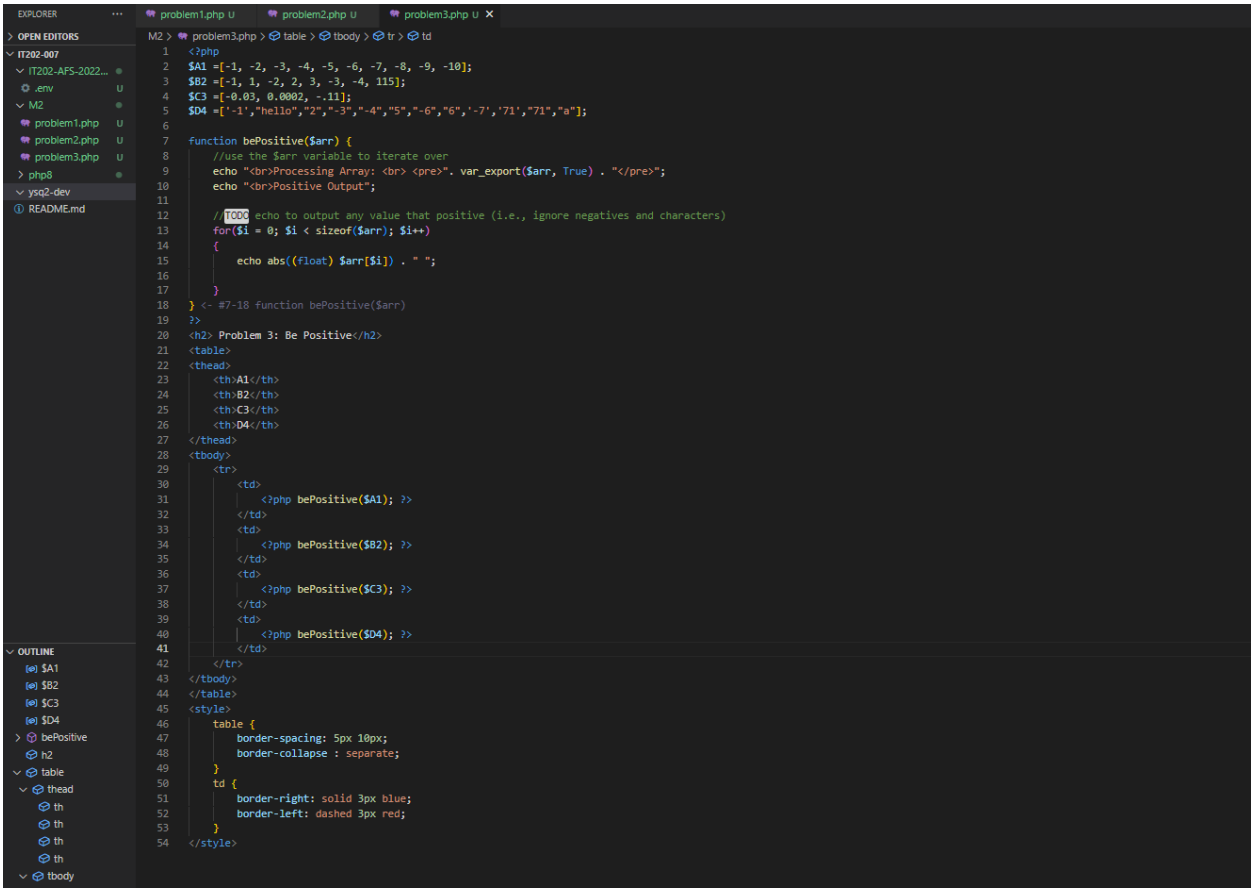
Add a caption explaining what you're showing in the screenshot (required for full credit)

Sub-Task 2: Describe how you solved the problem
For this task, what I did was use a for each in order for the program to read every number in the array. Then, I created $total to add every number in the array and after, to round it to the second decimal.

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%.

CODE



```php
<?php
$A1 =[-1, -2, -3, -4, -5, -6, -7, -8, -9, -10];
$B2 =[-1, 1, -2, 2, 3, -3, -4, 115];
$C3 =[-0.03, 0.0002, -.11];
$D4 =['-1',"hello","2","-3","-4","5","-6","6",'-7','71',"71","a"];

function bePositive($arr) {
    //use the $arr variable to iterate over
    echo "<br>Processing Array: <br> <pre>". var_export($arr, True) . "</pre>";
    echo "<br>Positive Output";

    // TODO echo to output any value that positive (i.e., ignore negatives and characters)
    for($i = 0; $i < sizeof($arr); $i++)
    {
        echo abs((float) $arr[$i]) . " ";

    }
} <- #7-18 function bePositive($arr)
?>
<h2> Problem 3: Be Positive</h2>
<table>
<thead>
    <th>A1</th>
    <th>B2</th>
    <th>C3</th>
    <th>D4</th>
</thead>
<tbody>
    <tr>
        <td>
            <?php bePositive($A1); ?>
        </td>
        <td>
            <?php bePositive($B2); ?>
        </td>
        <td>
            <?php bePositive($C3); ?>
        </td>
        <td>
            <?php bePositive($D4); ?>
        </td>
    </tr>
</tbody>
</table>
<style>
    table {
        border-spacing: 5px 10px;
        border-collapse : separate;
    }
    td {
        border-right: solid 3px blue;
        border-left: dashed 3px red;
    }
</style>
```

OUTPUT

Problem 3: Be Positive

A1	B2	C3	D4
Processing Array: array (0 => -1, 1 => -2, 2 => -3, 3 => -4, 4 => -5, 5 => -6, 6 => -7, 7 => -8, 8 => -9, 9 => -10,) Positive Output1 2 3 4 5 6 7 8 9 10	Processing Array: array (0 => -1, 1 => 1, 2 => -2, 3 => 2, 4 => 3, 5 => -3, 6 => -4, 7 => 115,) Positive Output1 1 2 2 3 3 4 115	Processing Array: array (0 => -0.03, 1 => 0.0002, 2 => -0.11,) Positive Output0.03 0.0002 0.11	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',) Positive Output1 0 2 3 4 5 6 6 7 71 71 0

Add a caption explaining what you're showing in the screenshot (required for full credit)

Sub-Task 2: Describe how you solved the problem
For this task, I used abs float. Since each array is a decimal, using float will bypass an int or decimal and echo the absolute value of each array. Ignoring any strings that are implanted in the arrays.

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/~*ucid*/*ucid*-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/~*ucid*/*ucid*-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/~*ucid*/*ucid*-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/yessicaquezada/IT202-007/pull/4

Sub-Task 5: Talk about what you learned, any issues you had, how you resolved them.
I have tried my hardest to create the web.njit.edu page, but for some reason I wasn't able to solve it professor. I was able to create the code and run it on my local host, but creating the site, I was encountering various errors.