

## Assignment 2: PHP Crash Course.

Please navigate to your XAMPP folder using Windows Explorer for Windows users and using Finder-> Applications -> XAMPP for mac users and then look for folder named "htdocs".

Create a new directory Assignment 2 or with whatever name you like under HTDOCS directory.

Open your PHPStorm or an IDE of your choosing (eclipse?). Please, always, prefer an IDE over a regular text editor because a non-IDE may add un-necessary characters in your program which will lead to errors.

Within your PHPStorm -> Open Project. Select the destination folder as the folder you just created under XAMPP/HTDOCS. So, your path should look something like →C://XAMPP/HTDOCS/<YOUR FOLDER NAME> {windows users for mac users it will look different}

Using PHPStorm create a new php file and name it index.php [make sure the extension is php]- now your folder under htdocs should have an index.php file within.

Using PHPStorm type the following in your index.php file and save it.

```
<?php
```

```
phpinfo();
```

```
?>
```

Switch to your browser and type the following

localhost/<YOUR FOLDERNAME>

If everything is done correctly, your computer's PHP information that is installed within XAMPP should show up.

Copy and paste the following code (Code 1 – 3) one at a time in your index.php and run the program. When you get the result, please take a screen grab.

You may also try creating different files for each code for example code1.php, code2.php and so on. Then in the browser address bar append the filename following the directory name and notice what happens

Please make 1 PDF with your screenshots in it. The screenshots should contain your code and its output. Please do not forget to upload your codes as well. Your code can be in one file OR you can upload multiple code files in a zipped folder.

Example: <http://localhost/<yourdirectory>/index.php>

Example: <http://localhost:8080/<yourdirectory>/code1.php>

Example: <http://localhost:80/<yourdirectory>/code.php>

Example: <http://localhost:8888/<yourdirectory>/code.php>

#### CODE 1:

```
<html>
<head>
  <title>My First Program</title>
</head>
<body>
  <?php
    echo "<h3>". "This is my first program" . "</h3>";
    echo "<h5>". "I am trying to print a string in the browser window" . "</h5>";
  ?>
</body>
</html>
```

**CODE 2:**

```

<html>
<head>
  <title>My Second Program: Variable Assignment</title>
</head>
<body>
  <?php
    $string1 = 'First String assigned to a variable called $String1';
    $string2 = 'Second String assigned to a variable called $String2';
    echo "<h1>".$string1."</h1>";
    echo "<h2>".$string2."</h2>";
  ?>
</body>
</html>

```

**CODE 3:**

```

<html>
<head>
  <title>Different Operators Demo</title>
</head>
<body>
  <?php

    $number1 = '57';
    $number2 = '105';

    echo "<h3>I am demonstrating different arithmetic functions</h3>";
    echo "Addition : ". ($number1 + $number2) . "<br><br>";
    echo "Subtraction : ". ($number1 - $number2) . "<br><br>";
    echo "Division : ". ($number1 / $number2) . "<br><br>";
    echo "Multiplication : ". ($number1 * $number2) . "<br><br>";

  ?>
</body>
</html>

```

Please create your PHP programs for the following.

**CODE 4:**

Using the last code (CODE 3). Try and add 2 or 3 more variables to the code and assign different numerical values the variables respectively. Following which, use those variables within the processing code to display all the arithmetic results.

**CODE 5:**

Normally we do not type http or https while we visit a website. The browsers automatically prefix it based on the configuration of the website you are visiting. There is a way to find out if the page you are visiting is http or https. Write a PHP program to find out if the webpage you are visiting is http or not.

Hint: SUPERGLOBAL variable \$\_SERVER

**CODE 6:**

Since we are going to use PHP to represent data from our database tables, we need to find a way to prettify the data. What's better than tables! Write a PHP program to display the following information in tabular format. <DB connection is NOT required at this time, combination of HTML and PHP will suffice. >

Name	UserName	Email Address	Cellular Number
Frodo Baggins	Fbaggins	<a href="mailto:fbaggins@lotr.com">fbaggins@lotr.com</a>	555-555-5555
Tyrion Lannister	HandOfGod1	<a href="mailto:handofgod@got.com">handofgod@got.com</a>	111-111-1111
Aang	TheLastAirBender	<a href="mailto:iBendAirForFun@tlab.com">iBendAirForFun@tlab.com</a>	000-000-0000

Not sure how many of you follow these movies / books: <https://theportalist.com/50-of-the-best-fantasy-characters-ever>

**CODE 7:**

We talked about arrays. There will be times when we will have arrays with duplicate values. Can you find a way to remove duplicates from the given array? Can you also sort the array after the duplicates are removed?

Input: (2,3,3,5,4,1,2,2,1,1,2,2,3,4,5,5)

Output: (1,2,3,4,5)

**CODE 8:**

We all are familiar with Prime Numbers! If not –

([https://en.wikipedia.org/wiki/Prime\\_number](https://en.wikipedia.org/wiki/Prime_number))

Our goal is to find a sum total of all the prime numbers less than 100.

Note: There are 25 prime numbers are there in less than 100.

2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, 73, 79, 83, 89, 97  
and sum of all these numbers is 1060.

**CODE 9:**

Please write a PHP code to print the following 6\*6 matrix?

1	2	3	4	5	6
2	4	6	8	10	12
3	6	9	12	15	18
5	10	15	20	25	30
6	12	18	24	30	36

**CODE 10:**

We are often asked to find the total of numbers 1 2 3 4 5 6 7 8 9 10!!

Please write a PHP code to find the total of numbers

Hint: strlen + for loop

**CODE 11:**

Array sorting and making it pretty. Please the following array in your PHP program and try and make it look like the sample output we have here.

```
$color = array('black', 'green', 'white', 'yellow', 'indigo', 'blue', 'purple', 'red')
```

Output:

black, green, white, yellow, indigo, blue, purple, red,

- Black
- Blue
- Green
- Indigo
- Purple
- Red
- White
- Yellow

**CODE 12:**

The weather has been super weird lately. It's a perfect reason for us to find the beach days we've have had and also the days when we wanted to stay home and never get out of the bed. Like today!! I guess?! –

write a PHP program to find the 5 highest and lowest temperatures. Also, find the average.

Recorded temperatures: 79, 60, 70, 68, 71, 68, 73, 85, 66, 64, 76, 93, 85, 86, 73, 68, 62, 73, 52, 65, 74, 62, 62, 65, 64, 68, 73, 75, 79, 73

**CODE 13:**

The nicer prime! Program in PHP so you can display all the integers between 100 and 250 that are divisible by 2.

**CODE 14:**

We spoke about Associative Arrays (**maps for JAVA enthusiasts**) having keys and their values = \$key→\$value. We should be “easily” able to find the largest key for the following associate array of countries and their capitals. Please find the largest key from the following associative array.

```
$ceu = array( "Italy"=>"Rome", "Luxembourg"=>"Luxembourg", "Belgium"=>
"Brussels", "Denmark"=>"Copenhagen", "Finland"=>"Helsinki", "France" => "Paris",
"Slovakia"=>"Bratislava", "Slovenia"=>"Ljubljana", "Germany" => "Berlin", "Greece"
=> "Athens", "Ireland"=>"Dublin", "Netherlands"=>"Amsterdam",
"Portugal"=>"Lisbon", "Spain"=>"Madrid", "Sweden"=>"Stockholm",
"United Kingdom"=>"London", "Cyprus"=>"Nicosia", "Lithuania"=>"Vilnius",
"Czech Republic"=>"Prague", "Estonia"=>"Tallin", "Hungary"=>"Budapest",
"Latvia"=>"Riga", "Malta"=> "Valetta", "Austria" => "Vienna",
"Poland"=>"Warsaw");
```

*Sample Output: United Kingdom*

**CODE 15:**

*Me: “I need to create a new password for my next social media site”  
PHP “Say No More!”.*

---Write a code so that you can generate a password that HAS TO CONTAIN uppercase, lower case, numeric, special characters; try and use rand() and shuffle() functions.

*Generated Sample Password: p1'1#z7GHRqfy123*

**CODE 16:**

Although PHP allows you to have heterogenous elements (different data types) it is even easier to manage homogenous elements (of the same type). We can easily simulate it by trying to remove duplicates using 1 function → `array_keys()`. Please write a PHP code to remove duplicates from the following arrays.

```
$colors = array(  
    0 => 'Red',  
    1 => 'Green',  
    2 => 'White',  
    3 => 'Black',  
    4 => 'Red',  
);
```

```
$numbers = array(  
    0 => 100,  
    1 => 200,  
    2 => 100,  
    3 => -10,  
    4 => -10,  
    5 => 0,  
);
```

**CODE 17:**

Copy rights. Write a PHP program to display your copyrights with current year.  
Sample: © 2019 Praviin M | PHP is legen-waitforit-dary



**CODE 18:**

Everyone likes to know how far their birthday is. We can use PHP to find it out for us! Please create a simple PHP code "birthday count down counter" that will tell you the number of days remaining for your next birthday.

*Sample Output: Days till next birthday: -100 days!*

**CODE 19:**

Difference between two dates! Write a PHP code to find out the difference between two dates.

*Sample Output: 61 years, 6 months, 24 days*

**CODE 20: Date-formatting;**

Please write a simple PHP program to convert yyyy-mm-dd to dd-mm-yyyy.

**CODE 21: Even more date formatting;**

Please write a simple PHP code to print date like: Thursday the 27th

**CODE 22: Localization.**

Since we live in a connected world with different time zones. I am sure the Italians (in Italy) want to know the current time as much as the Americans do. So please write a PHP script to get the current date in Italian and also in EST (American)

Hint: timezones and setlocale, explore GMT, America\_New\_York.

**CODE 23: String Manipulations;**

Please Write a PHP script to:

- a) transform a string to all uppercase letters.
- b) transform a string to all lowercase letters.
- c) make a string's first character uppercase.
- d) make a string's first character of all the words uppercase.

String:

*Haikus are easy.  
But sometimes they don't make sense.  
Refrigerator.*

*Advice for those in,  
a difficult position.  
First, be flexible.*

*I like kittens, YEAH!  
They are really fluffy, YEAH!  
OMG KITTENS.*

**CODE 24:**

Interesting in knowing if a certain word occurs in a Shakespearian novel? Like ARMGAUNT??

Write a PHP code to find a specific string in a sea of strings.!! Find the word:

ARMGAUNT

And count the number of times the word appears in the string.

String:

*In the opening act of Antony & Cleopatra, one of Cleopatra's attendants, Alexas, describes a meeting with Marc Antony and talks of him mounting "an armgaunt steed, who neighed so high that what I would have spoke was beastly dumb'd by him." The second part of this line makes it clear that Antony's horse neighed so loudly that anything he might have said would have been drowned out, but what about armgaunt? Some editors take this word literally, and suggest it literally means "gaunt-armed," or slender-limbed. But if Alexas is trying to make Antony sound as gallant and heroic as possible, why would he point out how skinny his horse looks?*

**CODE 25: String manipulations;**

Write a PHP program to remove all leading zeroes from a string.

*String: '000245123.24'*

*Output :245123.24*

**CODE 26:**

Write a PHP script to find the maximum and minimum marks from the following set of arrays.

Sample arrays:

`$marks1 = array(360,310,310,330,313,375,456,111,256);`

`$marks2 = array(350,340,356,330,321);`

`$marks3 = array(630,340,570,635,434,255,298);`

**CODE 27:**

Arithmetic operations on character variables: `$d = 'U00123'`. Using this variable print the following numbers.

Sample Output:

U001241

U001242

U001243

U001244

U001245

.....

U0012410

**CODE 28:**

Write a PHP script to generate unique random numbers within a range.

Sample Range: (14, 86)

Sample Output: 17 46 53 61 74 etc.

**CODE 29:**

Write a PHP script to print letters from 'a' to 'z'.

Expected Result: abcdefghijklmnopqrstuvwxyz

**CODE 30:**

Create a script to construct the following pattern, using a nested for loop.

```
*
* *
* * *
* * * *
* * * * *
* * * * *
* * * * *
* * *
* * *
* *
*
```

To submit. Please copy paste your code and the output into a PDF. Try and have datetime stamp on your codes. PHPStorm should automatically generate one for you when you create a new file. Make sure your code is indented and commented properly. After you have assembled your PDF. Create a zipped file containing the PDF, all your code files and upload to the assignments section.

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