Web Application Development Practical 8: PHP Basics

This practical focuses on PHP basics, including arrays and loop. Create a new PHP file for each exercise.

You will need to run your new PHP files on your localhost.

Please refer to the notes from Lecture 14. PHP references are available at w3Schools, e.g. the reference for PHP arrays: http://www.w3schools.com/php/php ref array.asp

Solutions files are available for each exercise, but please try them yourself first.

The exercises are numbered to allow you to find the correct solution files, but please approach the exercises in whatever order you prefer.

Exercise 1

Write a PHP script to do the following:

- Create an array with the follow colours: white, green, red.
- Display the colors in the following way in the browser:

```
white, green, red,
```

- Sort the array and display the colours as a list:
 - o green
 - o red
 - o white

Exercise 2:

Copy the following array into a PHP file:

```
$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");
```

Write a PHP script which display the capital and country name from the above array \$ceu. Sort the list by the name of the country. The output should take the following format:

The capital of Netherlands is Amsterdam The capital of Greece is Athens The capital of Germany is Berlin

Exercise 3

Recorded temperatures: 78, 60, 62, 68, 71, 68, 73, 85, 66, 64, 76, 63, 75, 76, 73, 68, 62, 73, 72, 65, 74, 62, 62, 65, 64, 68, 73, 75, 79, 73

Write a PHP script to calculate and display average temperature, five lowest and highest temperatures.

Expected Output:

Average Temperature is: 70.6

List of five lowest temperatures: 60, 62, 63, 63, 64, List of five highest temperatures: 76, 78, 79, 81, 85,

Exercise 4

Write a PHP script which will count the "r" characters in the text "w3resource".

Exercise 5

Write a PHP script that creates the following table using for loops. Add cellpadding="3px" and cellspacing="0px" to the table tag.

1 * 1 = 1	1 * 2 = 2	1 * 3 = 3	1 * 4 = 4	1 * 5 = 5
2 * 1 = 2	2 * 2 = 4	2 * 3 = 6	2 * 4 = 8	2 * 5 = 10
3 * 1 = 3	3 * 2 = 6	3 * 3 = 9	3 * 4 = 12	3 * 5 = 15
4 * 1 = 4	4 * 2 = 8	4 * 3 = 12	4 * 4 = 16	4 * 5 = 20
5 * 1 = 5	5 * 2 = 10	5 * 3 = 15	5 * 4 = 20	5 * 5 = 25
6 * 1 = 6	6 * 2 = 12	6 * 3 = 18	6 * 4 = 24	6 * 5 = 30

Exercise 6

Write a PHP script to:

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

Use the following string:

"the quick brown fox jumps over the lazy dog."

Refer to the PHP reference for Strings for help.

Exercise 7

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

Start String: '000547023.24'
Expected Output: '547023.24'

Exercise 8

Write a PHP script to get time difference in days and years, months, days, hours, minutes, seconds between two dates. Note: Use DateTime class.

Use the following dates:

2012-06-01 02:12:51 2014-05-12 11:10:00

For more examples of basic PHP exercises see: http://www.w3resource.com/php-exercises/