Practical 3 - Array Basics

An array in PHP is actually an ordered map. A map is a type that maps values to keys. This type is optimized in several ways, so you can use it as a real array, or a list (vector), hashtable (which is an implementation of a map), dictionary, collection, stack, queue and probably more. The language-construct `array()` is used to create an array in PHP.

```
$a = array( [key =>] value, …)
```

As each element value of the array can be any type it means that it can be another array as well. If an array element value is another array then this is a multidimensional array.

1. Working with arrays

Create a php script with a variable called "colorlist" which is an array with the 7 colors of the rainbow in this order: Violet, Indigo, Blue, Green, Yellow, Orange, and Red. The script should then echo a table with sample text on each color using the array to format the font. Present the table sorted by colors alphabetically.

2. Using for loops

Modify the previous script, in order to accomplish the same task, using a `for` loop to "walk" through the array instead of manually selecting each element. Use `sizeof()` to find the size of the array. Use comments to document your script.

3. `foreach()`

Using the `foreach()` construct (search the PHP manual), modify your script once more, in order to generalize the program to work with an array of any size. Test your script by adding and removing values in the array.

4. Forms and Arrays

Create a form that asks the user to select the days he wants to attend a certain event. The user should be able to select any combination of days from a calendar week (Mon – Sun). Once submitted, the script should populate an array with the user's selection in human readable form and output a table showing the user's selection. Use proper formatting in your code to add visual style to the form and the table.