



Array

1. \$colors = array('white', 'green', 'red')

Write a PHP script that will display the colors as unordered list :

Expected Output:

- green
- red
- white

2. \$cities= 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");

Create a PHP script to displays the capital and country name from the above array \$cities. Sort the list by the capital of the country.

Expected Output:

The capital of Netherlands is Amsterdam

The capital of Greece is Athens

The capital of Germany is Berlin

3. \$color = array(4 => 'white', 6 => 'green', 11=> 'red');

Write a PHP script to display the first element of the above array.

Expected Output: white

4. Write a PHP script that inserts a specific new item in an array in any position.

Sample Input:

Array 1 2 3 4 5
Location: 4
New Item: \$

Expected Output: 1 2 3 \$ 4 5



5. Write a PHP script to sort the following associative array depending on the key value [asc] :

Sample Input:

```
$fruits = array("d" => "lemon", "a" => "orange", "b" => "banana", "c" => "apple");
```

Expected Output:

```
c = apple
b = banana
d = lemon
a = orange
```

6. Write a PHP script to calculate and display the average temperature for the recorded reads, also the script should display the list of the five lowest and the five highest temperatures

Sample Input: 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

Expected Output:

Average Temperature is: 70.6

List of seven lowest temperatures: 60, 62, 63, 63, 64,

List of seven highest temperatures: 76, 78, 79, 81, 85,

7. Write a PHP program to merge the following two arrays.

Sample Input:

```
$array1 = array("color" => "red", 2, 4);
$array2 = array("a", "b", "color" => "green", "shape" => "trapezoid", 4);
```

Expected Output:

```
Array
(
    [color] => green
    [0] => 2
    [1] => 4
    [2] => a
    [3] => b
    [shape] => trapezoid
    [4] => 4
)
```



8. Write a PHP function to change the following array's and convert all the strings to upper case.

Sample Input:

```
$colors = array("red", "blue", "white", "yellow");
```

Expected Output :

```
Array
(
    RED
    BLUE
    WHITE
    YELLOW
)
```



Function

1. Write a PHP script to check if the inserted number is a prime number

Sample Input: 3

Expected Output: 3 is a prime number

2. Write a PHP script to reverse a string

Sample Input: remove

Expected Output: evomer

3. Write a PHP function to swap to variables?

Sample Input: x = 12 y= 10

Expected Output: y=12 x=10

4. Write a PHP function to check if a number is an Armstrong number or not ?

**Armstrong number is a number that is equal to the sum of cubes of its digits.

Sample Input: 407

Expected Output: 407 is Armstrong Number

5. Write a PHP function that checks whether a passed string is a palindrome or not?

Sample Input: Eva, can I see bees in a cave?

Expected Output: Yes it is a palindrome

6. Write a PHP function to remove duplicates from an array ?

Sample Input:

```
$array1 = array(2, 4, 7, 4, 8, 4);
```

Expected Output:

```
$array1 = array(2, 4, 7, 8);
```



Logical Statements and Operators

1. **Write PHP to check if the sum of the two given numbers equals 30, if the condition is true the return their sum otherwise return false**

Sample Input: [firstInteger => 10 , secondInteger => 10]
Sample Output: 'false'

2. **Write in PHP script to check if the given positive number is a multiple of 3.**

Sample Input: number = 20
Sample Output: 'false'

3. **Write a PHP script to check if the integer value is in the range of [20-50] inclusive.**

Sample Input: number = 50
Sample Output: 'true'

4. **Write PHP script to find the largest number between the three integers**

Sample Input: [1, 5, 9]
Sample Output: 9

5. **Write PHP script to calculate the monthly electricity bill according to these rules**

- a. For first 50 units – 2.50 JOD/Unit
- b. For next 100 units – 5.00 JOD/Unit
 - c. For next 100 units – 6.20 JOD/Unit
 - d. For units above 250 – 7.50 JOD/Unit

6. **Write php script to make a calculator, the calculator should contain the four main operations**

- e. Addition
- e. Subtraction
- e. Multiplication
- e. Division



7. Write php script to check if a person is eligible to vote, minimum age required for voting is 18.

Sample Input: 15

Sample Output: 'is no eligible to vote'

8. Write php script to check whether a number is positive, negative or zero

Sample Input: -60

Sample Output: 'Negative'

9. Write a PHP to find the grade for the student, after calculating the average of his score in all the subject

Sample Inputs: [60,86,95,63,55,74,79,62,50]

Sample Output: 'D'

Range	Grade
<60	F
<70	D
<80	C
<90	B
<100	A

Loops



1. Create a script that displays 1-2-3-4-5-6-7-8-9-10 on one line. There will be no dash (-) at the start and end position.

Expected Output: 1-2-3-4-5-6-7-8-9-10

2. Create a script using a for loop to add all the integers between 0 and 30 and display the total.

Expected Output: total as a number

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

Expected Output:

```
A A A A A
A A A B B
A A C C C
A D D D D
E E E E E
```

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

Expected Output:

```
1 1 1 1 1
1 1 1 2 2
1 1 3 3 3
1 4 4 4 4
5 5 5 5 5
```

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



Expected Output:

```
1 0 0 0 0
0 2 0 0 0
0 0 3 0 0
0 0 0 4 0
  0 0 0 0 5
```

6. Write a program to calculate and print the factorial of a number using a for loop. The factorial of a number is the product of all integers up to and including that number.

Sample Input: 5

Expected Output: 120

7. Write a PHP script that creates the following table using for loops. Add cellpadding="3px" and cell spacing="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



PHP String and String Functions

1. Write a PHP script to:

- Convert the entered string to uppercase.
- Convert the entered string to lowercase.
- Make the first letter of the string uppercase.
- Make the first letter of each word capitalized.

2. Write a PHP script splitting the following numeric string to be a date format.

Sample Output: '085119'
Expected Output: 08:51:19

3. Write a PHP script to check whether the sentence contains a specific word.

Sample Output: 'I am a full stack developer at orange coding academy'
Sample Word: 'Orange'
Expected Output: 'Word Found!'

4. Write a PHP script to extract the file name from the URL.

Sample Output: 'www.orange.com/index.php'
Expected Output: 'index.php'

5. Write a PHP script to extract the username from the following email address.

Sample Output: 'info@orange.com'
Expected Output: 'info'

6. Write a PHP script to get the last three characters from the string.

Sample Output: 'info@orange.com'
Expected Output: 'com'

7. Write a PHP script to generate simple random passwords [do not use rand () function] from a given string.

Sample Output: '1234567890ABCDEFGHIJKLMNOPQRSTUVWXYZabcefghijklmnopqrstuvwxyz'

Expected Output: 254ABCc or h242sfeDAFEe32 -> random number



8. Write a PHP script to replace the first word of the sentence with another word.

Sample Output: 'That new trainee is so genius.'

Sample Word: 'Our'

Expected Result: the new trainee is so genius.