

PHP Essential Functions

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Array Functions

count () - Returns the number of elements in an array

Example:

```
$arr = [1, 2, 3, 4, 5];  
echo count($arr);
```

Output: 5

array_push () - Adds one or more elements to the end of an array

Example:

```
$arr = [1, 2, 3];  
array_push($arr, 4, 5);  
print_r($arr);
```

Output: Array ([0] => 1 [1] => 2 [2] => 3 [3] => 4 [4] => 5)

array_pop () - Removes the last element from an array

Example:

```
$arr = [1, 2, 3];  
array_pop($arr);  
print_r($arr);
```

Output: Array ([0] => 1 [1] => 2)

array_shift() - Removes the first element from an array

Example:

```
$arr = [1, 2, 3];  
array_shift($arr);  
print_r($arr);
```

```
Output: Array ( [0] => 2 [1] => 3 )
```

array_unshift() - Adds one or more elements to the beginning of an array

Example:

```
$arr = [2, 3];  
array_unshift($arr, 1);  
print_r($arr);
```

```
Output: Array ( [0] => 1 [1] => 2 [2] => 3 )
```

array_merge() - Merges two or more arrays

Example:

```
$arr1 = [1, 2];  
$arr2 = [3, 4];  
$result = array_merge($arr1, $arr2);  
print_r($result);
```

```
Output: Array ( [0] => 1 [1] => 2 [2] => 3 [3] =>  
4 )
```

array_slice() - Extracts a portion of an array

Example:

```
$arr = [1, 2, 3, 4, 5];  
$result = array_slice($arr, 1, 3);  
print_r($result);
```

```
Output: Array ( [0] => 2 [1] => 3 [2] => 4 )
```

array_keys() - Returns all the keys of an array

Example:

```
$arr = ["name" => "John", "age" => 25];  
print_r(array_keys($arr));
```

Output: Array ([0] => name [1] => age)

array_values() - Returns all the values of an array

Example:

```
$arr = ["name" => "John", "age" => 25];  
print_r(array_values($arr));
```

Output:Array ([0] => John [1] => 25)

in_array() - Checks if a value exists in an array

Example:

```
$arr = ["apple", "banana", "cherry"];  
echo in_array("banana", $arr) ? "Found" : "Not  
Found";
```

Output: Found

array_map() - Applies a function to all elements in an array

Example:

```
$arr = [1, 2, 3];  
$result = array_map(fn($x) => $x * 2, $arr);  
print_r($result);
```

Output:Array ([0] => 2 [1] => 4 [2] => 6)

array_filter() - Filters elements of an array based on a condition

Example:

```
$arr = [1, 2, 3, 4, 5];  
$result = array_filter($arr, fn($x) => $x % 2 ==  
0);  
print_r($result);
```

Output: Array ([1] => 2 [3] => 4)

array_reduce() - Reduces an array to a single value using a callback

Example:

```
$arr = [1, 2, 3, 4];  
$result = array_reduce($arr, fn($carry, $item) =>  
$carry + $item, 0);  
echo $result;
```

Output: 10

String Functions

strlen() - Returns the length of a string

Example:

```
echo strlen("Hello");
```

Output: 5

mb_strlen() - Returns the length of a string, handling multibyte characters (e.g., UTF-8)

Example:

```
echo mb_strlen("ملا");
```

Output: 4

strpos() - Finds the position of the first occurrence of a substring

Example:

```
echo strpos("Hello World", "World");
```

Output: 6

str_replace() - Replaces all occurrences of a substring with another string

Example:

```
echo str_replace("world", "PHP", "Hello world!");
```

Output: Hello PHP!

str_ireplace() - Case-insensitive replacement

Example:

```
echo str_ireplace("WORLD", "PHP", "Hello world!");
```

Output: Hello PHP!

substr() - Extracts a portion of a string

Example:

```
echo substr("Hello World", 6, 5);
```

Output: World

trim() - Removes whitespace from the beginning and end of a string

Example:

```
echo trim(" Hello World ");
```

Output: Hello World

strtolower() - Converts a string to lowercase

Example:

```
echo strtolower("HELLO WORLD");
```

```
Output: hello world
```

strtoupper () - Converts a string to uppercase

Example:

```
echo strtoupper("hello world");
```

```
Output: HELLO WORLD
```

ucfirst () | **lcfirst ()** - **ucfirst** Capitalizes the first letter, **lcfirst** Converts the first letter to lowercase

Example:

```
echo ucfirst("hello world");
```

```
echo lcfirst("Hello World");
```

Output:

```
Hello world
```

```
hello World
```

ucwords () - Capitalizes the first letter of each word

Example:

```
echo ucwords("hello world");
```

```
Output: Hello World
```

htmlspecialchars () - Converts special HTML characters to their entity equivalents

Example:

```
echo htmlspecialchars("<b>Hello</b>");
```

```
Output: &lt;b&gt;Hello&lt;/b&gt;
```

implode () - Joins an array into a string

Example:

```
arr = ["apple", "banana", "cherry"];  
  
echo implode(", ", $arr);
```

Output: apple, banana, cherry

explode () - Splits a string into an array

Example:

```
str = "apple,banana,cherry";  
  
print_r(explode(", ", $str));
```

Output: Array ([0] => apple [1] => banana [2] => cherry)

Number Functions

abs () - Returns the absolute (positive) value of a number

Example:

```
echo abs(-10);
```

Output: 10

ceil () - Rounds a number up to the nearest integer Example:

```
echo ceil(4.3);
```

Output: 5

floor() - Rounds a number down to the nearest integer

Example:

```
echo floor(4.9);
```

Output: 4

round() - Rounds a number to the nearest integer (or a specified decimal place)

Example:

```
echo round(4.5);
```

```
echo round(4.567, 2);
```

Output:

5

4.57

max() - Returns the largest value from a list or array

Example:

```
echo max(10, 20, 5);
```

Output: 20

rand() - Generates a random number

Example:

```
echo rand(); // Random number
```

```
echo rand(1, 100); // Random number between 1 and 100
```

Output: (random number)

number_format() - Formats a number with grouped thousands and optional decimal places

Example:

```
echo number_format(1234567.89, 2);
```

Output: 1,234,567.89
