

Array Functions Examples

array_chunk()

In order to split an array into chunks of the specified size, we use this function.

```
<?php
//Example of array_chunk()
$arr=array(1,4,5,7,12,-9,33,78,1,90,56,88, 11, 12, 13, 99, 110, 543);
echo 'Total elements in array: '.count($arr);
echo '<br>Array Elements...';
foreach($arr as $a)
    echo $a.' ';
echo '<br>Splitting the above array in chunks of size 4...<br>';
$chunks=array_chunk($arr, 4);
foreach($chunks as $c)
{
    print_r($c);
    echo '<br>';
}
?>
```

Output

```
Total elements in array: 18
Array Elements...1 4 5 7 12 -9 33 78 1 90 56 88 11 12 13 99 110 543
Splitting the above array in chunks of size 4...
Array ( [0] => 1 [1] => 4 [2] => 5 [3] => 7 )
Array ( [0] => 12 [1] => -9 [2] => 33 [3] => 78 )
Array ( [0] => 1 [1] => 90 [2] => 56 [3] => 88 )
Array ( [0] => 11 [1] => 12 [2] => 13 [3] => 99 )
Array ( [0] => 110 [1] => 543 )
```

array_column()

For the purpose of retrieving the elements of any specified column, we can use the array_chunk() function. For instance, in the previous example, we create an array of chunks of size 4. So, to display the elements from a specified column name of all the arrays we can use this function. In other words, the name of the column needs to be specified as the second parameter. Therefore, the first of the following example displays all elements of column '0', and so on.

```
<?php
echo '<br><br>Printing elements of column [0]...<br>';
$zerocolumn=array_column($chunks, '0');
print_r($zerocolumn);
echo '<br><br>Printing elements of column [1]...<br>';
$onecolumn=array_column($chunks, '1');
print_r($onecolumn);
echo '<br><br>Printing elements of column [2]...<br>';
```

```

$twocolumn=array_column($chunks, '2');
print_r($twocolumn);
echo '<br><br>Printing elements of column [3]...<br>';
$threecolumn=array_column($chunks, '3');
print_r($threecolumn);
?>

```

Output

Printing elements of column [0]...

Array ([0] => 1 [1] => 12 [2] => 1 [3] => 11 [4] => 110)

Printing elements of column [1]...

Array ([0] => 4 [1] => -9 [2] => 90 [3] => 12 [4] => 543)

Printing elements of column [2]...

Array ([0] => 5 [1] => 33 [2] => 56 [3] => 13)

Printing elements of column [3]...

Array ([0] => 7 [1] => 78 [2] => 88 [3] => 99)

Array_diff()

```

<?php
//Program to find array difference
echo '<h2>Array Difference in Values</h2>';
$arr1=array(7,1,9,23,4,5,12, 8);
$arr2=array(7,1,4,2,5,23,99,90,34,67,15);
$arr3=array_diff($arr1, $arr2);
$arr4=array_diff($arr2, $arr1);
echo 'First Array....<br>';
foreach($arr1 as $a)
    echo $a.' ';
echo '<br>Second Array....<br>';
foreach($arr2 as $a)
    echo $a.' ';
echo '<br>Array Difference (First Array - Second Array)....<br>';
foreach($arr3 as $a)
    echo $a.' ';
echo '<br>Array Difference (Second Array - First Array)....<br>';
foreach($arr4 as $a)
    echo $a.' ';
echo '<br>';
?>

```

Output

Array Difference in Values

First Array....

7 1 9 23 4 5 12 8

Second Array....

7 1 4 2 5 23 99 90 34 67 15

Array Difference (First Array - Second Array)....

9 12 8

Array Difference (Second Array - First Array)....

2 99 90 34 67 15

Array_diff_assoc()

```
<?php
//To find th difference between key value pairs
echo '<h2>Array Difference in Key-Value pairs</h2>';
$arr1=array('a'=>17,'b'=>1.8,'c'=>9,'d'=>523,'e'=>4,'f'=>56,'g'=>12,'h'=>80
);
$arr2=array('p'=>7,'q'=>1,'r'=>4,'a'=>2,'b'=>1.8,'c'=>23,'d'=>99,'e'=>90,'f'
'=>34,'k'=>67,'g'=>12);
$arr3=array_diff_assoc($arr1, $arr2);
$arr4=array_diff_assoc($arr2, $arr1);
echo 'First Array....<br>';
print_r($arr1);
echo '<br>Second Array....<br>';
print_r($arr2);
echo '<br>Array Difference (First Array - Second Array)....<br>';
print_r($arr3);
echo '<br>Array Difference (Second Array - First Array)....<br>';
print_r($arr4);
?>
```

Output

Array Difference in Key-Value pairs

First Array...

Array ([a] => 17 [b] => 1.8 [c] => 9 [d] => 523 [e] => 4 [f] => 56 [g] => 12 [h] => 80)

Second Array....

Array ([p] => 7 [q] => 1 [r] => 4 [a] => 2 [b] => 1.8 [c] => 23 [d] => 99 [e] => 90 [f] => 34 [k] => 67 [g] => 12)

Array Difference (First Array - Second Array)....

Array ([a] => 17 [c] => 9 [d] => 523 [e] => 4 [f] => 56 [h] => 80)

Array Difference (Second Array - First Array)....

Array ([p] => 7 [q] => 1 [r] => 4 [a] => 2 [c] => 23 [d] => 99 [e] => 90 [f] => 34 [k] => 67)

E

Array Difference in Key-Value pairs

First Array....

Array ([a] => 17 [b] => 1.8 [c] => 9 [d] => 523 [e] => 4 [f] => 56 [g] => 12 [h] => 80)

Second Array....

Array ([p] => 7 [q] => 1 [r] => 4 [a] => 2 [b] => 1.8 [c] => 23 [d] => 99 [e] => 90 [f] => 34 [k] => 67 [g] => 12)

Array Difference (First Array - Second Array)....

Array ([a] => 17 [c] => 9 [d] => 523 [e] => 4 [f] => 56 [h] => 80)

Array Difference (Second Array - First Array)....

Array ([p] => 7 [q] => 1 [r] => 4 [a] => 2 [c] => 23 [d] => 99 [e] => 90 [f] => 34 [k] => 67)

Array_diff_key()

```
<?php
//To find th difference between keys of two arrays
echo '<h2>Array Difference in Keys</h2>';
$arr1=array('a'=>17,'b'=>1.8,'c'=>9,'d'=>523,'e'=>4,'f'=>56,'g'=>12,'h'=>80
);
$arr2=array('p'=>7,'q'=>1,'r'=>4,'a'=>2,'b'=>1.8,'c'=>23,'d'=>99,'e'=>90,'f'
'=>34,'k'=>67,'g'=>12);
$arr3=array_diff_key($arr1, $arr2);
$arr4=array_diff_key($arr2, $arr1);
echo 'First Array....<br>';
print_r($arr1);
echo '<br>Second Array....<br>';
print_r($arr2);
echo '<br>Array Difference (First Array - Second Array)....<br>';
print_r($arr3);
echo '<br>Array Difference (Second Array - First Array)....<br>';
print_r($arr4);
?>
```

Array Difference in Keys

```
First Array....
Array ( [a] => 17 [b] => 1.8 [c] => 9 [d] => 523 [e] => 4 [f] => 56 [g] => 12 [h] => 80 )
Second Array....
Array ( [p] => 7 [q] => 1 [r] => 4 [a] => 2 [b] => 1.8 [c] => 23 [d] => 99 [e] => 90 [f] => 34 [k] => 67 [g] => 12 )
Array Difference (First Array - Second Array)....
Array ( [h] => 80 )
Array Difference (Second Array - First Array)....
Array ( [p] => 7 [q] => 1 [r] => 4 [k] => 67 )
```

Array_combine()

```
<?php

$key_array=array('M', 'J', 'A', 'L', 'V', 'S');

$value_array=array(67.9, 80.5, 45, 67.99, 98.33, 64);

echo 'Key Array....<br>';

print_r($key_array);

echo '<br>Value Array...<br>';

print_r($value_array);

echo '<br>Combining Key and Value Arrays...<br>';

$combined=array_combine($key_array, $value_array);
```

```
print_r($combined);
```

```
?>
```

Key Array...

Array ([0] => M [1] => J [2] => A [3] => L [4] => V [5] => S)

Value Array...

Array ([0] => 67.9 [1] => 80.5 [2] => 45 [3] => 67.99 [4] => 98.33 [5] => 64)

Combining Key and Value Arrays...

Array ([M] => 67.9 [J] => 80.5 [A] => 45 [L] => 67.99 [V] => 98.33 [S] => 64)

Array_diff(), array_diff_assoc(), array_diff_key()

```
<?php
```

```
//Program to find array difference
```

```
echo '<h2>Array Difference in Values</h2>';
```

```
$arr1=array(7,1,9,23,4,5,12, 8);
```

```
$arr2=array(7,1,4,2,5,23,99,90,34,67,15);
```

```
$arr3=array_diff($arr1, $arr2);
```

```
$arr4=array_diff($arr2, $arr1);
```

```
echo 'First Array....<br>';
```

```
foreach($arr1 as $a)
```

```
    echo $a.' ';
```

```
echo '<br>Second Array....<br>';
```

```
foreach($arr2 as $a)
```

```
    echo $a.' ';
```

```
echo '<br>Array Difference (First Array - Second Array)....<br>';
```

```
foreach($arr3 as $a)
```

```
    echo $a.' ';
```

```
echo '<br>Array Difference (Second Array - First Array)....<br>';
```

```
foreach($arr4 as $a)
```

```
    echo $a.' ';
```

```
echo '<br>';
```

```
?>
```

```

<?php
//To find th difference between key value pairs
echo '<h2>Array Difference in Key-Value pairs</h2>';

$arr1=array('a'=>17,'b'=>1.8,'c'=>9,'d'=>523,'e'=>4,'f'=>56,'g'=>12,'h'=>80);

$arr2=array('p'=>7,'q'=>1,'r'=>4,'a'=>2,'b'=>1.8,'c'=>23,'d'=>99,'e'=>90,'f'=>34,'k'=>6
7,'g'=>12);

$arr3=array_diff_assoc($arr1, $arr2);

$arr4=array_diff_assoc($arr2, $arr1);

echo 'First Array....<br>';

print_r($arr1);

echo '<br>Second Array....<br>';

print_r($arr2);

echo '<br>Array Difference (First Array - Second Array)....<br>';

print_r($arr3);

echo '<br>Array Difference (Second Array - First Array)....<br>';

print_r($arr4);

?>

```

```

<?php
//To find th difference between keys of two arrays
echo '<h2>Array Difference in Keys</h2>';

$arr1=array('a'=>17,'b'=>1.8,'c'=>9,'d'=>523,'e'=>4,'f'=>56,'g'=>12,'h'=>80);

$arr2=array('p'=>7,'q'=>1,'r'=>4,'a'=>2,'b'=>1.8,'c'=>23,'d'=>99,'e'=>90,'f'=>34,'k'=>6
7,'g'=>12);

$arr3=array_diff_key($arr1, $arr2);

$arr4=array_diff_key($arr2, $arr1);

echo 'First Array....<br>';

print_r($arr1);

echo '<br>Second Array....<br>';

print_r($arr2);

```

```

echo '<br>Array Difference (First Array - Second Array)....<br>';

print_r($arr3);

echo '<br>Array Difference (Second Array - First Array)....<br>';

print_r($arr4);

?>

```

Array Difference in Values

```

First Array....
7 1 9 23 4 5 12 8
Second Array....
7 1 4 2 5 23 99 90 34 67 15
Array Difference (First Array - Second Array)....
9 12 8
Array Difference (Second Array - First Array)....
2 99 90 34 67 15

```

Array Difference in Key-Value pairs

```

First Array....
Array ( [a] => 17 [b] => 1.8 [c] => 9 [d] => 523 [e] => 4 [f] => 56 [g] => 12 [h] => 80 )
Second Array....
Array ( [p] => 7 [q] => 1 [r] => 4 [a] => 2 [b] => 1.8 [c] => 23 [d] => 99 [e] => 90 [f] => 34 [k] => 67 [g] => 12 )
Array Difference (First Array - Second Array)....
Array ( [a] => 17 [c] => 9 [d] => 523 [e] => 4 [f] => 56 [h] => 80 )
Array Difference (Second Array - First Array)....
Array ( [p] => 7 [q] => 1 [r] => 4 [a] => 2 [c] => 23 [d] => 99 [e] => 90 [f] => 34 [k] => 67 )

```

Array Difference in Keys

```

First Array....
Array ( [a] => 17 [b] => 1.8 [c] => 9 [d] => 523 [e] => 4 [f] => 56 [g] => 12 [h] => 80 )
Second Array....
Array ( [p] => 7 [q] => 1 [r] => 4 [a] => 2 [b] => 1.8 [c] => 23 [d] => 99 [e] => 90 [f] => 34 [k] => 67 [g] => 12 )
Array Difference (First Array - Second Array)....
Array ( [h] => 80 )
Array Difference (Second Array - First Array)....
Array ( [p] => 7 [q] => 1 [r] => 4 [k] => 67 )

```

Array_fill()

```
<?php
```

```
//Filling an array with values
```

```

echo 'Filling 6 elements starting from index 3 with value \'abc\'<br>';

$arr=array_fill(3, 6, 'abc');

print_r($arr);

```

```
echo '<br>Starting with -ve index....<br>';
```

```
$arr1=array_fill(-12, 4, 0);
```

```
print_r($arr1);
```

```
?>
```

Filling 6 elements starting from index 3 with value 'abc'

Array ([3] => abc [4] => abc [5] => abc [6] => abc [7] => abc [8] => abc)

Starting with -ve index....

Array ([-12] => 0 [0] => 0 [1] => 0 [2] => 0)

Array_filter()

```
<?php
```

```
function OddNumbers($n)
```

```
{
```

```
    if($n%2==1)
```

```
        return true;
```

```
    return false;
```

```
}
```

```
function EvenNumbers($n)
```

```
{
```

```
    if($n%2==0)
```

```
        return true;
```

```
    return false;
```

```
}
```

```
?>
```

```
<?php
```

```
//Example of array_filter() function
```

```
$myarray=array(12, 1, 9, 67, 45, 34, 22, 100, 97, 58, 9, 123, 66, 19, 86);
```

```
echo 'Original Array...<br>';
```

```
print_r($myarray);
```

```
echo '<br>Array with only odd values using array_filter() method....<br>';
```

```
$myarray1=array_filter($myarray, "OddNumbers");
```

```
print_r($myarray1);
```



```

echo '<br>Array with only even values using array_filter() method....<br>';

$myarray2=array_filter($myarray, "EvenNumbers");

print_r($myarray2);

?>

```

Original Array...

Array ([0] => 12 [1] => 1 [2] => 9 [3] => 67 [4] => 45 [5] => 34 [6] => 22 [7] => 100 [8] => 97 [9] => 58 [10] => 9 [11] => 123 [12] => 66 [13] => 19 [14] => 86)

Array with only odd values using array_filter() method....

Array ([1] => 1 [2] => 9 [3] => 67 [4] => 45 [8] => 97 [10] => 9 [11] => 123 [13] => 19)

Array with only even values using array_filter() method....

Array ([0] => 12 [5] => 34 [6] => 22 [7] => 100 [9] => 58 [12] => 66 [14] => 86)

Array_flip()

```
<?php
```

```
//Flipping keys and values
```

```
$arr1=array('a'=>1, 'b'=>10, 'c'=>100, 'd'=>1000, 'e'=>10000);
```

```
echo '<br>Original Array....<br>';
```

```
print_r($arr1);
```

```
$arr2=array_flip($arr1);
```

```
echo '<br>Flipped Array....<br>';
```

```
print_r($arr2);
```

```
?>
```

Original Array....

Array ([a] => 1 [b] => 10 [c] => 100 [d] => 1000 [e] => 10000)

Flipped Array....

Array ([1] => a [10] => b [100] => c [1000] => d [10000] => e)

Array_intersect(), array_intersect_assoc(), array_intersect_key()

```
<?php
```

```
//Array Intersection
```

```
echo '<h2>Comparing Values only</h2>';
```

```
$arr1=array(12, -99, 78, 3.9, 45, 's', 55, 14);
```

```
$arr2=array(1,2,5,2,55,'s', 3,8,9,45,23);
```

```
$arr3=array_intersect($arr1, $arr2);  
echo 'First Array...<br>';  
print_r($arr1);  
echo '<br>Second Array...<br>';  
print_r($arr2);  
echo '<br>Array Intersection (Array 1 &cap; Array 2)...<br>';  
print_r($arr3);  
$arr4=array_intersect($arr2, $arr1);  
echo '<br>Array Intersection (Array 2 &cap; Array 1)...<br>';  
print_r($arr4);
```

```
echo '<h2>Comparing Keys and Values</h2>';  
$arr3=array_intersect_assoc($arr1, $arr2);  
echo 'First Array...<br>';  
print_r($arr1);  
echo '<br>Second Array...<br>';  
print_r($arr2);  
echo '<br>Array Intersection (Array 1 &cap; Array 2)...<br>';  
print_r($arr3);  
$arr4=array_intersect_assoc($arr2, $arr1);  
echo '<br>Array Intersection (Array 2 &cap; Array 1)...<br>';  
print_r($arr4);
```

```
echo '<h2>Comparing Keys Only</h2>';  
$arr3=array_intersect_key($arr1, $arr2);  
echo 'First Array...<br>';  
print_r($arr1);  
echo '<br>Second Array...<br>';
```

```

print_r($arr2);

echo '<br>Array Intersection (Array 1 &cap; Array 2)...<br>';

print_r($arr3);

$arr4=array_intersect_key($arr2, $arr1);

echo '<br>Array Intersection (Array 2 &cap; Array 1)...<br>';

print_r($arr4);

?>

```

Comparing Values only

```

First Array...
Array ( [0] => 12 [1] => -99 [2] => 78 [3] => 3.9 [4] => 45 [5] => s [6] => 55 [7] => 14 )
Second Array...
Array ( [0] => 1 [1] => 2 [2] => 5 [3] => 2 [4] => 55 [5] => s [6] => 3 [7] => 8 [8] => 9 [9] => 45 [10] => 23 )
Array Intersection (Array 1 ∩ Array 2)...
Array ( [4] => 45 [5] => s [6] => 55 )
Array Intersection (Array 2 ∩ Array 1)...
Array ( [4] => 55 [5] => s [9] => 45 )

```

Comparing Keys and Values

```

First Array...
Array ( [0] => 12 [1] => -99 [2] => 78 [3] => 3.9 [4] => 45 [5] => s [6] => 55 [7] => 14 )
Second Array...
Array ( [0] => 1 [1] => 2 [2] => 5 [3] => 2 [4] => 55 [5] => s [6] => 3 [7] => 8 [8] => 9 [9] => 45 [10] => 23 )
Array Intersection (Array 1 ∩ Array 2)...
Array ( [5] => s )
Array Intersection (Array 2 ∩ Array 1)...
Array ( [5] => s )

```

Comparing Keys Only

```

First Array...
Array ( [0] => 12 [1] => -99 [2] => 78 [3] => 3.9 [4] => 45 [5] => s [6] => 55 [7] => 14 )
Second Array...
Array ( [0] => 1 [1] => 2 [2] => 5 [3] => 2 [4] => 55 [5] => s [6] => 3 [7] => 8 [8] => 9 [9] => 45 [10] => 23 )
Array Intersection (Array 1 ∩ Array 2)...
Array ( [0] => 12 [1] => -99 [2] => 78 [3] => 3.9 [4] => 45 [5] => s [6] => 55 [7] => 14 )
Array Intersection (Array 2 ∩ Array 1)...
Array ( [0] => 1 [1] => 2 [2] => 5 [3] => 2 [4] => 55 [5] => s [6] => 3 [7] => 8 )

```

Array_map()

```
<?php
```

```
function find_squareroot($n)
```

```
{
    return sqrt($n);
}
```

```
?>
```

```

<?php
$arr1=array(1,2,3,4,5,6,7,8);
$arr2=array_map('find_squareroot', $arr1);
echo 'Original Array....<br>';
print_r($arr1);
echo '<br>After Calling array_map() Function...<br>';
print_r($arr2);
?>

```

Original Array...

Array ([0] => 1 [1] => 2 [2] => 3 [3] => 4 [4] => 5 [5] => 6 [6] => 7 [7] => 8)

After Calling array_map() Function...

Array ([0] => 1 [1] => 1.4142135623731 [2] => 1.7320508075689 [3] => 2 [4] => 2.2360679774998 [5] => 2.4494897427832 [6] => 2.6457513110646 [7] => 2.8284271247462)

Array_merge()

```

<?php
    //Merging Two Arrays

    $arr1=array(78,12,44,53,91,8,441,7);
    $arr2=array(7,1,87,3,56,14,531,89);
    $arr3=array_merge($arr1, $arr2);

    echo 'First Array...<br>';
    print_r($arr1);
    echo '<br>Second Array...<br>';
    print_r($arr2);
    echo '<br>Merged Array...<br>';
    print_r($arr3);
?>

```

First Array...

Array ([0] => 78 [1] => 12 [2] => 44 [3] => 53 [4] => 91 [5] => 8 [6] => 441 [7] => 7)

Second Array...

Array ([0] => 7 [1] => 1 [2] => 87 [3] => 3 [4] => 56 [5] => 14 [6] => 531 [7] => 89)

Merged Array...

Array ([0] => 78 [1] => 12 [2] => 44 [3] => 53 [4] => 91 [5] => 8 [6] => 441 [7] => 7 [8] => 7 [9] => 1 [10] => 87 [11] => 3 [12] => 56 [13] => 14 [14] => 531 [15] => 89)