

Find missing numbers in array

CAREERS 2.0
by stackoverflow



+



Have projects on Codeplex?
Import them easily to your profile

I'm trying to find each missing number in an array like the following.

```
Array ( [0] => 1 [1] => 2 [2] => 3 [3] => 4 [4] => 5 [5] => 6 [6] => 7 [7] => 8
[8] => 9 [9] => 10 [10] => 11 [11] => 12 [12] => 13 [13] => 14 [14] => 15 [15] =>
[16] => 17 [17] => 18 [18] => 19 [19] => 20 [20] => 21 [21] => 22 [22] => 23
[23] => 24 [24] => 25 [25] => 26 [26] => 27 [27] => 28 [28] => 29 [29] => 30
[30] => 31 [31] => 32 [32] => 33 [33] => 34 [34] => 35 [35] => 36 [36] => 37
[37] => 38 [38] => 39 [39] => 40 [40] => 41 [41] => 42 [42] => 43 [43] => 44
[44] => 45 [45] => 46 [46] => 47 [47] => 48 [48] => 49 [49] => 50 [50] => 51
[51] => 52 [52] => 53 [53] => 54 [54] => 55 [55] => 56 [56] => 57 [57] => 58
[58] => 59 [59] => 60 [60] => 61 [61] => 62 [62] => 63 [63] => 64 [64] => 67
[65] => 68 [66] => 69 )
```

The numbers 65 , 66 are missing in this particular array.

My question how do I figure out which numbers are missing with the help of PHP. Specifically what I need to find out is the lowest missing number.

Why: Because then I can assign that number to a member as an id.

[php](#) [arrays](#)

edited Nov 13 '10 at 13:53



[codaddict](#)

103k 22 177 283

asked Nov 12 '10 at 9:2



[nickifrandsen](#)

102 7

2 I don't think that's the best way to get a unique id - what happens when you have 100000000 users? Might take a while to find the id. – [Jeff Foster](#) Nov 12 '10 at 9:28

@Jeff Foster, if at any time it takes a long time to find the id, the obvious solution is to delete users with id > 1000; . It will be fast again! :) – [acm](#) Nov 12 '10 at 10:07

feedback

4 Answers

You can make use of `array_diff` and `range` functions as:

```
// given array. 3 and 6 are missing.
$arr1 = array(1,2,4,5,7);

// construct a new array:1,2....max(given array).
$arr2 = range(1,max($arr1));

// use array_diff to get the missing elements
$missing = array_diff($arr2,$arr1); // (3,6)
```

answered Nov 12 '10 at

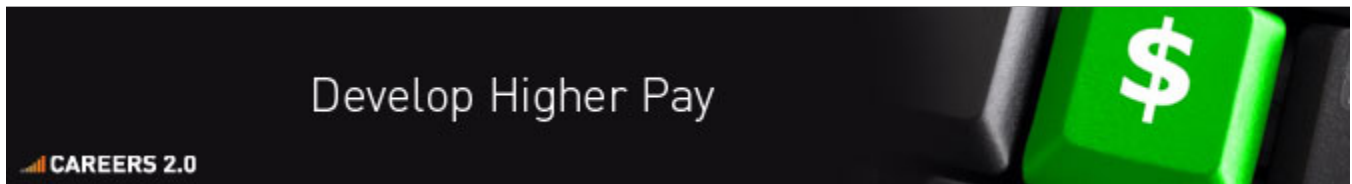


[codaddict](#)

103k 22 177

This solution works perfect for me :) – [nickifrandsen](#) Nov 12 '10 at 12:49

feedback



I'm assuming the number is the element, not the key, of the array. I'm also assuming that the numbers from 1, not 0.

```
$Expected = 1;
foreach ($InputArray as $Key => $Number)
{
    if ($Expected != $Number)
    {
        break;
    }
    $Expected++;
}

echo $Number;
```

answered Nov 12 '10 at