

PHP

Fonctions associées aux tableaux

Rappels

- Tableaux **associatifs**
 - fait **correspondre** des **valeurs** à des **clés**
 - **clés** : entier ou chaîne de caractères
 - **valeurs** : ce que l'on souhaite, pas forcément homogène
- Syntaxe
 - `$t = array(1, 'a');` `$t = array('b'=>1, 2=>'a');`
 - `$t[] = 'b';` `$t['z'] = 's';`
- Parcours
 - `foreach ($t as $val) { ... }`
 - `foreach ($t as $cle => $val) { ... }`

Tableaux vus comme des piles/files



- Empiler

int array_push (array &tab, mixed var [, mixed ...])

considère *tab* comme une pile, et empile les variables *var, ...* à la fin de *tab*

retourne le nouveau nombre d'éléments du tableau.

- Dépiler

mixed array_pop (array &tab)

dépile et retourne le dernier élément du tableau *tab*

Tableaux vus comme des piles/files

```
$stack = array();  
array_push($stack, "orange");  
array_push($stack, "banane");  
array_push($stack, "pomme");  
print_r($stack);
```

Array

```
(  
    [0] => orange  
    [1] => banane  
    [2] => pomme  
)
```

```
);  
array_push($stack, "framboise");  
print_r($stack);
```

```
$stack = array();  
$fruit = array("orange", "banane", "pomme", "framboise");  
print_r($stack);  
echo $fruit[0];
```

Array

```
(  
    [0] => orange  
    [1] => banane  
    [2] => pomme  
    [3] => framboise  
)
```

```
);  
echo $fruit[0];
```

Tableaux vus comme des piles/files



- Enfiler

int array_unshift (array &*tab*, mixed *var* [, mixed ...])

considère *tab* comme une file, et enfiler les variables *var*, ...
au début de *tab*

retourne le nouveau nombre d'éléments du tableau.

- Défiler

mixed array_shift (array &*tab*)

défile et retourne le premier élément du tableau *tab*

Tableaux vus comme des piles/files

```
$queue = array(
    'orange',
    'pomme',
    'banane'
);

array_unshift($queue, 'framboise');

print_r($queue);
```

Array

```
(
    [0] => banane
    [1] => pomme
    [2] => framboise
)
```

```
$stack = array(
    'orange',
    'pomme',
    'banane'
);

$fruit = array_pop($stack);

print_r($stack);

echo $fruit;
```

Array

```
(
    [0] => pomme
    [1] => framboise
    [2] => orange
    [3] => banane
)
```

Tris sur les tableaux

```
$fruits = array("lemon", "orange",  
               "banana", "apple");
```

```
▪ bool sort ( array $fruits )  
sort($fruits)  
foreach ($fruits) {  
    echo "fruit: " . $fruits . "\n"; }
```

fruits[0] = orange
fruits[1] = lemon
fruits[2] = banana
fruits[3] = apple

```
▪ bool rsort ( array $fruits )  
rsort($fruits)  
foreach ($fruits) {  
    echo "fruit: " . $fruits . "\n"; }
```

fruits[0] = apple
fruits[1] = banana
fruits[2] = lemon
fruits[3] = orange

Tris sur les tableaux

```
$fruits = array("lemon", "orange",  
               "banana", "apple");
```

```
■ bool asort ( $fruits [, $flags] )  
asort($fruits)  
foreach ($fruits) {  
    echo "fruit: " . $fruits . "\n"; }  
fruits[1] = orange  
fruits[0] = lemon  
fruits[2] = banana  
fruits[3] = apple
```

```
■ bool arsort ( $fruits [, $flags] )  
arsort($fruits)  
foreach ($fruits) {  
    echo "fruit: " . $fruits . "\n"; }  
fruits[3] = apple  
fruits[2] = banana  
fruits[0] = lemon  
fruits[1] = orange
```


Tris sur les tableaux

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

```
■ bool ksort ( flags )  
ksort($fruits)  
foreach ($fruits) {  
    echo "fruit: " . $key . " = " . $value . "\n"; }
```

fruits[d] = lemon
fruits[c] = apple
fruits[b] = banana
fruits[a] = orange

```
■ bool krsort ( flags )  
krsort($fruits)  
foreach ($fruits) {  
    echo "fruit: " . $key . " = " . $value . "\n"; }
```

fruits[a] = orange
fruits[b] = banana
fruits[c] = apple
fruits[d] = lemon

Mélanges aléatoires sur les tableaux

```
$numbers = range(1, 10);
```

```
▪ bool shuffle ( array &tab )
```

```
shuffle($numbers);
```

```
foreach ($numbers as $number) {
```

```
    echo "$number ";
```

```
}
```

9 7 6 5 2 4 1 3 10 8

Fonctions utiles sur les tableaux

- `int count (mixed var [, int mode])`
- `bool array_key_exists (mixed key, array search)`
- `array array_keys (array input [, mixed search_value [, bool strict]])`
- `array array_values (array input)`
- `mixed array_search (mixed needle, array haystack [, bool strict])`
- `bool in_array (mixed needle, array haystack [, bool strict])`

Implosion / explosion

- **array explode** (string *delimiter*, string *string* [, int *limit*])

```
$pizza =
```

```
"piece1 piece2 piece3 piece4 piece5 piece6";
```

```
$pieces = explode(" ", $pizza);
```

```
print_r($pieces);
```

foo
*
1023

```
$data = "foo:*:1023:1000::/
```

```
list($user, $pass, $uid, $gid,
```

```
$home, $shell) = explode(':', $data);
```

```
echo $user."\n"; echo $pass."\n";
```

Array (
[0] => piece1
[1] => piece2
[2] => piece3
[3] => piece4
[4] => piece5
[5] => piece6
)

Implosion / explosion

- `string implode (string glue, array pieces)`

```
$array =  
    array('lastname', 'email', 'phone');  
$comma_separated = implode(",", $array);  
echo $comma_separated."\n";
```

lastname,email,phone

Récupération des clés / valeurs

- **array_keys** (*array input*)

\$array =

```
    array(0 => 100, "color" => "red");  
print_r(array_keys($array));
```

```
Array (  
    [0] => 0  
    [1] => color  
)
```

- **array_values** (*array input*)

\$array =

```
    array(0 => 100, "color" => "red");  
print_r(array_values($array));
```

```
Array (  
    [0] => 100  
    [1] => red  
)
```

Toujours plus de fonctionnalités

Consulter la documentation officielle

<http://fr.php.net/manual/fr/book.array.php>