



array

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In computer science an **array** is a data structure consisting of a group of elements that are accessed by indexing. In most programming languages each element has the same data type and the array occupies a contiguous area of storage. Most programming languages have a built-in array data type.

Some programming languages support array programming which generalizes operations and functions to work transparently over arrays as they do with scalars, instead of requiring looping over array members.

Well as we can see here guys, array can be divided into 3 categories:

- **Numeric array**
- **Associative array**
- **Multidimensional array**

We're going to define one by one of the categories that provided above with the example for each of it.

Numeric array

When we discuss about numeric ID it can be done using 2 ways. It is :

- Assign using Automatic method
- Assign using Manual method

A numeric array stores each element with a numeric ID key. Using the numeric ID, the index of the array can be stored using 2 ways. The below example is automatically assigned into the array.

Example 1:

```
7
8 <body>
9 <?
10     $names = array("ali","abu","bakar");
11
12 ?>
13 </body>
14 </html>
15
```

You can see the variable \$names that used as array that access by its element. This is how when a string have been initialize into the array. Because array by default is empty and to be cleared every array is start from 0. If we declared the array with the size of 9 actually the max for it is only 8. Because all array is start from 0. Next using the same technique we see the second example.

Example 2:

```

8  <body>
9  <?php
10
11      $number = 10;
12      $sekret = array("Example",7,$number);
13      echo $sekret[0]; //prints: Example
14      echo $sekret[1]; //prints: 7
15      echo $sekret[2]; //prints: 10
16
17  ?>
18  </body>
19  </html>
20

```

As you can see, elements in array can be any type scalar of data (string, number, variable) and so on. So, here the advantage when using array. You can initialize any type data into it as long it follow the rule using the array.

The second way stored the data in numeric ID can be done manually .As example below:

Example 1:

```

7
8  <body>
9  <?
10      $names[0] = "Ali";
11      $names[1] = "Abu";
12      $names[2] = "Bakar";
13  ?>
14  </body>
15  </html>
16

```

As we look the example above , every elements were initialize using the manual method. "peter" was initialize to Array number 1 aka names[0] and so on . So that's the example how it done using manual method.

The ID key can also be used in script .As example below :

```
7
8 <body>
9 <?php
10
11     $names[0] = "Ali";
12     $names[1] = "Abu";
13     $names[2] = "Bakar";
14
15     echo $names[1] . " dan " . $names[2] .
16         " bakar ". $names[0] . "bersama-sama";
17 ?>
18 </body>
19 </html>
20
```

Output :

