

Sorting an Array

Ordering data in an increasing or decreasing fashion.

- 1) **Sort:** Sorting an index array in ascending order.

```
<?php
$num=array(2,5,3,4,1);
sort($num);
$length=count($num);
for($i=0;$i<$length;$i++)
{
    echo $num[$i];
    echo "<br>";
} ?>
```

1
2
3
4
5

- 2) **rsort:** Sorting an index array in descending order.

```
<?php
$num=array(2,5,3,4,1);
rsort($num);
$length=count($num);
for($i=0;$i<$length;$i++)
{
    echo $num[$i];
    echo "<br>";
} ?>
```

5
4
3
2
1

- 3) **asort:** Sorting an associative array in ascending order according to value.

```
<?php
$age=array("Ram"=>29,"Hari"=>39,"Gopal"=>19);
asort($age);
$length=count($age);
foreach($age as $key=>$value)
{
    echo "Key : ".$key." & Value : ".$value;
    echo "<br>";
} ?>
```

Key : Gopal & Value : 19
Key : Ram & Value : 29
Key : Hari & Value : 39

- 4) **ksort:** Sorting an associative array in ascending order according to key.

```
<?php
$age=array("Ram"=>29,"Hari"=>39,"Gopal"=>19);
ksort($age);
$length=count($age);
foreach($age as $key=>$value)
{
    echo "Key : ".$key." & Value : ".$value;
    echo "<br>";
}
?>
```

Key : Gopal & Value : 19
Key : Hari & Value : 39
Key : Ram & Value : 29

- arsort:** Sorting an associative array in descending order according to their value.

```
<?php
$employee=array("Ram"=>1,"Hari"=>2,"Gopal"=>5,"Ramila"=>3,
"kundhan"=>4,);
arsort($employee);
$length=count($employee);
foreach($employee as $key=>$value)
{
    echo "Key : ".$key." & Value : ".$value;
    echo "<br>";
}
?>
```

Key : Gopal & Value : 5
Key : kundhan & Value : 4
Key : Ramila & Value : 3
Key : Hari & Value : 2
Key : Ram & Value : 1

- 5) **krsort:** Sorting an associative array in descending order according to their key.

```
<?php
$age = array("Peter"=>"35", "Ben"=>"37", "Joe"=>"43");
arsort($age);

foreach($age as $x => $x_value) {
    echo "Key=" . $x . ", Value=" . $x_value;
    echo "<br>";
}
?>
```

Key=Joe, Value=43
Key=Ben, Value=37
Key=Peter, Value=35

Q . Store the percentage of 4 students in an array ,so that % in a linear way & display the results in a tabular form.

```
<?php
$student=array("Ram"=>70,"Hari"=>76,"Gopal"=>56,"Ramila"=>67,);
arsort($student);
?>
```

```
<table border="1">
<tr>
<th>SN.No</th>
<th>Name</th>
<th>Percentage</th>
</tr>
```

SN.No	Name	Percentage
1	Hari	76
2	Ram	70
3	Ramila	67
4	Gopal	56

```
<?php
$i=1;
foreach($student as $key=>$value)
{
    echo "<tr>".
    "<td>".$i."</td>".
    "<td>".$key."</td>".
    "<td>".$value."</td>".
    "</tr>";
    $i++;
}
?>
</table>
```

PHP function with parameter

```
<?php
function addnum($num1,$num2)
{
    echo"sum of the given numbers : ".$($num1+$num2);
    echo"<br>";
}
function subnum($num1,$num2)
{
    echo"Difference of the given numbers : ".$($num1-$num2);
    echo"<br>";
}
function product($num1,$num2)
{
    echo"product of the given numbers : ".$($num1*$num2);
```

```
    echo"<br>";
}
function Division($num1,$num2)
{
    echo"Division of the given numbers : ".$($num1/$num2);
    echo"<br>";
}
function Remender($num1,$num2)
{
    echo"Remender of the given numbers : ".$($num1%$num2);
    echo"<br>";
}
function operation($num1,$num2,$opr)
{
    switch($opr)
    {
        case "+":
            addnum($num1,$num2);
            break;
        case "-":
            subnum($num1,$num2);
            break;
        case "*":
            product($num1,$num2);
            break;
        case "/":
            Division($num1,$num2);
            break;
        case "%":
            Remender($num1,$num2);
            break;
        default:
            echo"Invalid operators you Entered";
    }
}
} operation(2,5,"+");
operation(7,2,"-");
operation(29,5,"/");
operation(60,7,"%");
operation(50,45,"*");
?>
```

sum of the given numbers : 7
Difference of the given numbers : 5
Division of the given numbers : 5.8
Remender of the given numbers : 4
product of the given numbers : 2250

Pass by value

```
<?php
function addfive(&$num)
{
    $num+=5;
}
function addsix(&$num)
{
    $num+=6;
}
$orginum=10;
addfive($orginum);
echo "orginal value is :".$orginum."<br>";
addsix($orginum);
echo "orginal value is :".$orginum;
?>
```

orginal value is :10
orginal value is :10

Pass by reference

```
<?php
function addfive(&$num)
{
    $num+=5;
}
function addsix(&$num)
{
    $num+=6;
}
$orginum=10;
addfive($orginum);
echo "orginal value is :".$orginum."<br>";
addsix($orginum);
echo "orginal value is :".$orginum;
?>
```

orginal value is :15
orginal value is :21

WAP to store a information with an array displaying the value of array using function also display the no. of elements using an array

```
<?php
$age=array("Ram"=>20,"Hari"=>21,"Gita"=>22);
function display($me)
{
    asort($me);
    foreach($me as $key=>$value)
    {
        echo "key : ".$key." value : ".$value."<br>";
    }
    $length=count($me);
    echo "Total no of elements is :".$length;
}
display($age);
?>
```

key : Ram value : 20
key : Hari value : 21
key : Gita value : 22
Total no of elements is :3

Funtion returning a value

```
<?php
function subnum($num,$num2)
{
    $difference=$num-$num2;
    return $difference;
}
$result=subnum(20,10);
echo "difference of two number :".$result."<br>";
```

```
function addnum($num,$num2)
{
    $sum=$num+$num2;
    return $sum;
}
$result1=addnum(5,10);
echo "sum of the two number :".$result1."<br>";
?>
```

difference of two number :10
sum of the two number :15

WAP in php to take input from the user using form and calculate the

```
<html>
<body>
<form name="calfactorial" method="POST" action="" >
<label for="name"> Enter Your Number for Calculation of Factorial : </label>
<input type="number" name="num"><br>
<button type="submit" name="submission"> Submit</button>
</form>
</body>
</html>
```

```
<?php
if($_SERVER['REQUEST_METHOD']=="POST")
{
    $number=$_REQUEST['num'];
    if(empty($number))
    {
        echo "OHH !!! you not provide number so please input number first !!!";
    }
    else {
        function fact ($factnum)
        {
            $facts=1;
            if ($factnum==0) {
                echo "Factorial of ".$factnum." is : 1 ";
            }
            else {
                for ($i = 1 ; $i <= $factnum ; $i++)
                {
                    $facts=$facts*$i; # code...
                }
                /* Alternativeldy we can use following code for calculation of factorial.
                for ($i=$factnum ; $i<=$factnum ; $i--) {
                    $facts=$facts*$i; # code...
                }*/
                print "Factorial of ".$factnum." is : ".$facts;
            }
        }
        fact($number);
    }
    ?>
```

Enter Your Number for Calculation of Factorial :

Factorial of 5 is : 120

Change into UPPER or lower case

```
<html>
<body>
<form action="" method="post">
<label>Input Any words : </label>
<input type="text" name="word" value=""
<?php
if(isset($_POST['WORD'])) {
    echo ($_POST['WORD']);
}
?>">
<button type="submit" name="a">TO UPPER</button>
<button type="submit" name="b">to lower</button>
</form>
```

```
<?php
if(isset($_POST['a']))
{
    $name=$_POST['word'];

    $abcd=strtoupper($name);
    echo"<br>".$abcd;
}
```

```
if(isset($_POST['b'])) {
    $name=$_POST['word'];
    $abcd=strtolower($name);
    echo"<br>".$abcd;
}
?>
</body>
</html>
```

Input Any words :

Types of Array

<h3> Numeric Array :-</h3>

<?php

```
$num = array(1,2,3,4,5,6,7,8,9);  
echo "Use particular print option : ".<br>".$num[4].<br>";  
echo "OR".<br><br>".$num[4].<br>";  
?>
```

```
<pre>  
<?php  
print_r($num);  
echo "<br><br>";  
?>
```

<h3> Associative Array :-</h3>

<?php

```
$salaries = array('Ram' => 20000, 'Hari' => 30000);  
?>
```

```
<table border="2px">
```

```
<tr>
```

```
<th>Name</th>
```

```
<th>Web</th>
```

```
<th>DBMS</th>
```

```
<th>DSA</th>
```

```
</tr>
```

```
<?php foreach ($marks as $key => $value)
```

```
{
```

```
    echo '<tr>';
```

```
    echo '<td>'.$key.'</td>';
```

```
    foreach <?php
```

```
print_r($salaries);
```

```
echo "<br><br>";
```

```
?>
```

<h3> Multidimensional Array :-</h3>

<?php

```
$marks = array(  
    "Gopal" => array(  
        'web'=>20,  
        'DBMS'=>40,  
        'DSA'=>60  
    ),  
    "Hari" => array(  
        'web'=>24,  
        'DBMS'=>43,  
        'DSA'=>62  
    )  
);
```

Numeric Array :-

Use particular print option :

5

OR

Another way by using print_r :

Array

(

[0] => 1

[1] => 2

[2] => 3

[3] => 4

[4] => 5

[5] => 6

[6] => 7

[7] => 8

[8] => 9

)

Associative Array :-

Array

(

[Ram] => 20000

[Hari] => 30000

)

Multidimensional Array :-

Marks of Gopal in web is :20

WAP to calculate the percentage of any student assumed your own subject and display the division based on the percentage.

```
<?php
$math=70;
$science=80;
$cs=60;
$wt=50;
$dms=90;
$per=($math+$science+$cs+$wt+$dms)/5;
if($per>=32 && $per<=40)
{
    echo"<br> You Have Got Third Division With Total Marks : ".$per;
}
else if($per>40 && $per<=60)
{
    echo"<br> You Have Got Second Division With Total Marks : ".$per;
}
else if($per>60 && $per<=80)
{
    echo"<br> You Have Got First Division With Total Marks : ".$per;
}
else if($per>80 && $per<=100)
{
    echo"<br> You Have Got District Level With Total Marks : ".$per;
}
else
{
    echo"Sorry!!! you fail".$per;
}
?>
```

Result

You Have Got First Division With Total Marks : 70

Write a function take two numbers as parameter and display five numbers greater than second parameter and five numbers less than five parameters.

```
<?php
function greaterless($num,$num2)
{
    # code...
    echo "Five Numbers Which are less than first number u entered
    :". "<br><br>";
    for ($i = 1; $i <= 5; $i ++ )
    {
        echo --$num."<br><br>";
    }

    echo "Five Numbers Which are greater than second number u entered
    :<br><br>";
    for ($i = 1; $i <= 5; $i ++ )
    {
        echo ++$num2."<br><br>";
    }
}
greaterless(5,8);

?>
```

Result

Five Numbers Which are less than first number u entered :

4
3
2
1
0

Five Numbers Which are greater than second number u entered :

9
10
11
12
13

Photo Upload

```
<html>
<head>
    <title>upload phpto</title>
</head>
<body>
<form method="post" enctype="multipart/form-data" >

    <input type="file" name="photo">
    <button type="submit" name="upload">upload</button>
</form>

<?php
if(isset($_POST['upload']))
{
    $name=$_FILES['photo']['name'];
    $src=$_FILES['photo']['tmp_name'];
    $newname=time();
    $temp=explode(".", $name);
    $new_path=$newname.".".$temp[1];
    $name=$new_path;
    $target_dir="uploads/";
    $folder="uploads";
    if (!is_dir($folder))
    {
        mkdir($folder,0755);

    }
    move_uploaded_file($src, $target_dir.$name);
}

?>
</body>
</html>
```

Modifying Arrays

```
1.
<?php
$array = array(1,2,3,4,5);
$length=count($array);
for($i=0;$i<$length;$i++)
{

    $array[$i] = $array[$i]+10;
    echo"value : ".$array[$i];
    echo"<br>";

}
?>
```

value : 11
value : 12
value : 13
value : 14
value : 15

```
2.
<?php
$array = array(1,2,3,4,5);
$array[2]=7;
foreach($array as $value)
{
    echo $value."<br>";
}
?>
```

1
2
7
4
5

Looping through index array

```
<?php
$cars=array("Shada","BMW","Toyota");
$length=count($cars);
for($i=0;$i<$length;$i++)
{
    echo"Name of cars : ".$cars[$i];
    echo"<br>";
}
?>
```

Name of cars : Shada
Name of cars : BMW
Name of cars : Toyota

Multidimensional Array :-

```
<?php
$prisoner = array(
    "Ram" => array(
        'jail'=>"central jail, ktm",
        'name'=>"Ram",
        'Duration'=>"5 years",
        'Address'=>"Gausala KTM",
        'Crime'=>"Killing peoples",
    ),
    "Hari" => array(
        'jail'=>"central jail, ktm",
        'name'=>"Hari",
        'Duration'=>"6 Months",
        'Address'=>"Gausala KTM",
        'Crime'=>"Blackmaling",
    ),
    "Gita" => array(
        'jail'=>"central jail, Butwal",
        'name'=>"Gita",
        'Duration'=>"10 years",
        'Address'=>"Dhangadi",
        'Crime'=>"Killing peoples",
    ),
    "Rama" => array(
        'jail'=>"Dhangadi jail",
        'name'=>"Rama",
        'Duration'=>"2 Weeks",
        'Address'=>"Biratnagar KTM",
        'Crime'=>"Simple Robbery",
    ),
    "Sita" => array(
        'jail'=>"Ilam jail",
        'name'=>"Sita",
        'Duration'=>"1 year",
```

```
        'Address'=>"ilam-12,ilam KTM",
        'Crime'=>"curruption",
    ),
);
?>
<table border="2pix">
    <tr>
        <th>Jail Name</th>
        <th>Prisoner Name</th>
        <th>Duration In Jail</th>
        <th>Address of Prisoner</th>
        <th>Crime</th>
    </tr>

    <?php foreach ($prisoner as $key => $value)
    {
        echo '<tr>';
        foreach ($value as $key1 => $value1)
        {
            ?>

            <td><?php echo $value1; ?></td>

            <?php
            }
            echo '</tr>';
        }
    }
?>
</table>
```

Jail Name	Prisoner Name	Duration In Jail	Address of Prisoner	Crime
central jail, ktm	Ram	5 years	Gausala KTM	Killing peoples
central jail, ktm	Hari	6 Months	Gausala KTM	Blackmaling
central jail, Butwal	Gita	10 years	Dhangadi	Killing peoples
Dhangadi jail	Rama	2 Weeks	Biratnagar KTM	Simple Robbery
Ilam jail	Sita	1 year	ilam-12,ilam KTM	curruption

WAP in php to find out the greatest number among the three numbers.

```
<?php
$a=5;
$b=7;
$c=9;
if($a>$b && $a>$c) {
    echo"<br> A is a greatest numbrer : ".$a;
}
else if($b>$a && $b>$c) {
    echo"<br> B is the greatest number : ".$b;
}
else {
    echo"<br> C is the greatest number : ".$c;
}
?>
```

PHP function with parameter

```
<?php
function addnum($num1,$num2) {
    echo"sume of the given numbers : ".$($num1+$num2);
    echo"<br>";
}
function subnum($num1,$num2) {
    if($num1>$num2) {
        echo"Difference of the given numbers : ".$($num1-$num2);
        echo"<br>";
    }
    else {
        echo"Difference of the given numbers : ".$($num2-$num1);
        echo"<br>";
    } }
function product($num1,$num2) {
    echo"product of the given numbers : ".$($num1*$num2);
    echo"<br>";
}
function Division($num1,$num2) {
```

```
    if($num1>$num2)
    {
        echo"Division of the given numbers : ".$($num1/$num2);
        echo"<br>";
    }
    else {
        echo"Division of the given numbers : ".$($num2/$num1);
        echo"<br>";
    } }
function Remender($num1,$num2) {
    if($num1>$num2) {
        echo"Remender of the given numbers : ".$($num1%$num2);
        echo"<br>";
    }
    else {
        echo"Remender of the given numbers : ".$($num2%$num1);
        echo"<br>";
    } }
function operation($num1,$num2,$opr) {
    switch($opr)
    {
        case "+":
            addnum($num1,$num2);
            break;
        case "-":
            subnum($num1,$num2);
            break;
        case "*":
            product($num1,$num2);
            break;
        case "/":
            Division($num1,$num2);
            break;
        case "%":
            Remender($num1,$num2);
            break;
        default:
            echo"Invalid operators you Entered";
    } }
}
```

```
operation(2,5,"+");
operation(2,5,"-");
operation(2,5,"/");
operation(2,5,"%");
operation(2,5,"*");
?>
```

C is the greatest number : 9

PHP \$GLOBALS avriables

```
<?php
$x = 75;
$y = 25;
function addition() {
    $GLOBALS['z'] = $GLOBALS['x'] + $GLOBALS['y'];
}
addition();
echo $z;
?>
```

Output is
100

\$_SERVER['SERVER_ADDR']	Returns the IP address of the host server
\$_SERVER['SERVER_NAME']	Returns the name of the host server (such as www.w3schools.com)
\$_SERVER['SERVER_SOFTWARE']	Returns the server identification string (such as Apache/2.2.24)
\$_SERVER['SERVER_PROTOCOL']	Returns the name and revision of the information protocol (such as HTTP/1.1)
\$_SERVER['REQUEST_METHOD']	Returns the request method used to access the page (such as POST)
\$_SERVER['REQUEST_TIME']	Returns the timestamp of the start of the request (such as 1377687496)

POST

- The POST method transfers information via HTTP headers. The information is encoded as described in case of GET method and put into a header called QUERY_STRING.
- The POST method does not have any restriction on data size to be sent.
- The POST method can be used to send ASCII as well as binary data.
- The data sent by POST method goes through HTTP header so security depends on HTTP protocol. By using Secure HTTP you can make sure that your information is secure.
- The PHP provides \$_POST associative array to access all the sent information using POST method.

GET

- The GET method sends the encoded user information appended to the page request. The page and the encoded information are separated by the ? character.
- The GET method is restricted to send upto 1024 characters only.
- GET can't be used to send binary data, like images or word documents, to the server.
- The data sent by GET method can be accessed using QUERY_STRING environment variable.
- The PHP provides \$_GET associative array to access all the sent information using GET method.
- Never use GET method if you have password or other sensitive information to be sent to the server.

A superglobal is a predefined variable that is always accessible, regardless of scope. You can access the PHP superglobals through any function, class, or file.

PHP's superglobal variables are `$_SERVER`, `$GLOBALS`, `$_REQUEST`, `$_POST`, `$_GET`, `$_FILES`, `$_ENV`, `$_COOKIE`, `$_SESSION`.

`$_SERVER`

`$_SERVER` is an array that includes information such as headers, paths, and script locations. The entries in this array are created by the web server

```
<?php
echo $_SERVER['SCRIPT_NAME'];
//Outputs "/somefile.php"
?>
```

PHP `$_REQUEST`

PHP `$_REQUEST` is used to collect data after submitting an HTML form.

```
<html>
<body>
<form method="post" action="<?
  Name: <input type="text" name="fname">
  Address :<input type="text" name="address">
  <button type="submit" name="submitbtn">Submit</button>
</form>
```

```
<?php
if ($_SERVER["REQUEST_METHOD"] == "POST") {
  // collect value of input field
  $name = $_REQUEST['fname'];
  if (empty($name) || (empty($ address)))
```

```
{
  echo "Name or Address is empty";
} else {
  echo $name;
  echo $address;
}
}
?>
</body>
</html>
```

PHP `$_POST`

Information sent from a form via the **POST** method is invisible to others, since all names and/or values are embedded within the body of the HTTP request.

Also, there are no limits on the amount of information to be sent.

Moreover, POST supports advanced functionality such as support for multi-part binary input while uploading files to the server.

However, it is not possible to bookmark the page, as the submitted values are not visible.

```
<html>
<body>
<form method="post" action=" ">
  Name: <input type="text" name="fname">
  <button type="submit" name="submitbtn">Submit</button>
</form>
```

```
<?php
if (isset($_POST['submitbtn']))
{
  // collect value of input field
  $name = $_POST['fname'];
  echo"Your name is ". $name;
}
?>
</body>
</html>
```