### **PRACTICE PROGRAM:**

1. Write a PHP Script to define an array. Find the element from the array that matches the given value using the appropriate search function.

```
HTML & PHP CODE:
```

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <h2>find number in array it exist or not!</h2>
  <form action="Q1.php" method="post">
    <u>Enter a number:</u><input type="text" name="num" ><br>
    <input type="submit" name="submit" id="submit">
  </form>
</body>
</html>
<?php
error_reporting(0);
if($_SERVER["REQUEST_METHOD"]=="POST"){
 $n=$_POST["num"];
 $arr= array(1,2,3,4,5,6,7);
 $count=count($arr);
 echo"The array is:";
 for ($i=0; $i < $count; $i++) {
    echo"\t$arr[$i]";
 }
```

```
echo"<br/>
if (in_array($n,$arr)==1) {
    echo"The value $n are exist in array!"."<br>
} else {
    echo"The value $n are not exist in array!"."<br>
;
}
```

------

2. Write a PHP script to count the total number of vowels (a,e, i,o,u) from the string. Show the occurrences of each vowel from the string.

ANS:

```
<html>
  <body>
    <form action="Q2.php" method="GET">
      Enter a string: <input type="text" name="string"><br>
      <br>
      <button>click</button>
    </form>
  </body>
</html>
<?php
error_reporting(0);
if($_SERVER["REQUEST_METHOD"]=="GET")
{
$str=$_GET['string'];
$a=0;
 $e=0;
 $1=0;
```

```
$o=0;
 $u=0;
 for ($i=0; $i < strlen($str); $i++) {
  if ($str[$i]=='A'||$str[$i]=='a') {
    $a++;
  }elseif ($str[$i]=='E'||$str[$i]=='e') {
    $e++;
  }elseif ($str[$i]=='I'||$str[$i]=='i') {
    $1++;
  }elseif ($str[$i]=='O'||$str[$i]=='o') {
    $o++;
  }elseif($str[$i]=='U'||$str[$i]=='u'){
    $u++;
  }
}
echo"total 'A' or 'a' is: ".$a." <br>";
 echo"total 'E' or 'e' is: ".$e." < br>";
 echo"total 'I' or 'i' is: ".$I."<br>";
 echo"total 'O' or 'o' is : ".$o."<br>";
echo"total 'U' or 'u' is: ".$u."<br>";
}
?>
```

3. Write PHP program to perform the following operations on Indexed Array:

- a) Check the array element is positive or negative
- b) Calculate the average of array elements
- c) Calculate the sum of array elements.

ANS:

PHP CODE:

<?php

```
error_reporting(0);
if($_SERVER["REQUEST_METHOD"]=="GET"){
  $p=0;
  $n=0;
 $arr= array(1,2,3,4,5,6,7,8,9,10);
 for ($i=0; $i < count($arr); $i++) {
   if ($arr[$i]>0) {
     $p++;
   }else{
    $n++;
   }
 }
 print("total positive numbers are:".$p);
 echo"<br>";
 print("total negative numbers are:".$n);
 echo("<br>");
 $sum=0;
 for ($i=0; $i < count($arr); $i++) {
   $sum=$sum+$arr[$i];
 }
 $avg=$sum/count($arr);
 echo"The average of array element is:".$avg;
 echo("<br>");
 echo"The sum of array elements:".$sum;
}
?>
```

-----

# **SET A:**

- 1. Write PHP program to perform the following operations on Indexed Array:
- a) Union of two arrays
- b) Traverse the array elements in random order.

```
PHP CODE:
```

```
<?php
  $arr1=array(10,5,8,3,2,12);
  $arr2=array(1,2,3,6,8,7,4);
  $temp=$arr1;
  $temp1=array();
  $k=0;
   for($j=0;$j<count($arr2);$j++)
   {
    for($i=0;$i<count($arr1);$i++)
    if($arr1[$i]!=$arr2[$j])
     continue;
    }else{
     $temp1[$k]=$arr2[$j];
    }
   }
  }
  echo" <br > "." The array is:"." <br > ";
  print_r($temp);
  echo"<br>"."The array is:"."<br>";
  print_r($temp1);
  $arr3=array_merge($temp,$temp1);
  print_r($arr3);
  error_reporting(0);
```

```
print("<br>The original array is:<br>");
print_r($arr1);
sort($arr1);
print("<br> The sorted array is:<br>");
print_r($arr1);
$arr4=array_merge($a,$b);
print_r($arr4);
echo"<br/>'';
echo"traverse the array elements in random order:";
$a=array_rand($arr3);
print_r($a);
?>
```

- 2. Write a PHP program to perform the following operations on an associative array:
- a) Display the elements of an array along with the keys.
- b) Display the size of an array
- c) Delete an element from an array from the given index.
- d) Reverse the order of each element's key-value pair
- e) Traverse the elements in an array in random order

```
<form action="#" method="POST">
    <label for="index">Enter index for delete the element:</label>
    <input type="text" name="index" id="index"><br>
    <br>
    <label for="select"><b>select your choice:</b></label>
    <select name="select">
      <option value="display">Display array elements
      <option value="size">display size of array
      <option value="delete">delete element from given index/option>
      <option value="reverse">reverse element</option>
      <option value="traverse">traverse elements in random order
    </select>
    <hr>
    <br>
    <input type="submit" name="submit" id="submit" value="submit">
    <input type="reset" name="reset" id="reset" value="reset">
  </form>
</body>
</html>
<?php
error_reporting(0);
if(isset($_POST["submit"]))
  $index=$_POST["index"];
  $choice=$_POST["select"];
  $arr=array("c"=>"choice","s"=>"sort","n"=>"name","r"=>"relation");
  switch ($choice) {
    case 'display':
        echo"original array is:"."<br>";
        foreach($arr as $key=>$value)
        {
```

{

```
echo$key."=>".$value."<br>";
    }
  break;
case 'size':
  echo"original array is:"."<br>";
  foreach($arr as $key=>$value)
  {
    echo$key."=>".$value."<br>";
  }
  echo"<br>";
  $size=count($arr);
  echo"size of array is:".$size;
  break;
case 'delete':
  echo"original array is:"."<br>";
  foreach($arr as $key=>$value)
  {
    echo$key."=>".$value."<br>";
  }
  echo"<br>";
  $i=$_POST["index"];
  unset($arr[$i]);
  echo"After deleting element array is:"."<br>";
  foreach($arr as $key=>$value)
  {
    echo$key."=>".$value."<br>";
  }
  break;
case 'reverse':
  echo"original array is:"."<br>";
  foreach($arr as $key=>$value)
```

```
{
        echo$key."=>".$value."<br>";
      }
      echo"<br>";
      $arr1=array_reverse($arr);
      echo"reverse array is:"."<br>";
      foreach($arr1 as $key=>$value)
      {
        echo$key."=>".$value."<br>";
      }
      echo"<br>";
      break;
    case 'traverse':
      echo"original array is:"."<br>";
      foreach($arr as $key=>$value)
      {
        echo$key."=>".$value."<br>";
      }
      echo"<br>";
      echo"random element is:".array_rand($arr);
      break;
 }
}
?>
```

- 3. Write a PHP Script for the following:
- a) Declare and Display a multidimensional Array.
- b) Search and display a specific element from a Multidimensional array.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <form action="#" method="POST">
  <label for="index"><b>Enter index value for search:</b></label>
  <input type="number" name="index" id="index"><br>
  <br>
  <label for="select">
    <b>Select choice:</b>
  </label>
  <select name="select" id="select">
    <option value="display">display</option>
    <option value="search">search</option>
  </select><br>
  <br>
  <input type="submit" name="submit" id="submit" value="submit">
  <input type="reset" name="reset" id="reset" value="reset">
  </form>
</body>
</html>
<?php
if(isset($_POST["submit"]))
  $choice=$_POST["select"];
  $index=$_POST["index"];
```

```
$arr=array(
    array(1,2,3,4,5),
    array("ganesh","gopal","ram","rohan","rakesh")
  );
  switch ($choice) {
    case 'display':
      echo"The original array is:"."<br>";
      for($i=0;$i<count($arr);$i++)</pre>
      {
         for($j=0;$j<count($arr[$i]);$j++)
         {
           echo$arr[$i][$j]." ";
         }
         echo"<br>";
      }
      break;
    case 'search':
      echo"the value of search is:".$arr[0][$index]." ".$arr[1][$index];
      break;
  }
}
?>
```

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## **SET B:**

- 1. Write a PHP script to perform the following operations on string:
- i) Compare string 2 with string3.
- ii) Convert all the strings to Upper case
- iii) Convert all the strings to Lowercase.

ANS:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <form action="#" method="POST">
    <label for="str1"><b>Enter first string:</b></label>
    <input type="text" name="str1" id="str1"><br>
    <br>
    <label for="str2"><b>Enter second string:</b></label>
    <input type="text" name="str2" id="str2"><br>
    <br>
    <label for="select"><b>Select choice:</b></label>
    <select name="select" id="select">
      <option value="compare">compare two strings</option>
      <option value="uppercase">convert upper case</option>
      <option value="lowercase">convert lower case</option>
    </select>
    <br>
    <br>
    <input type="submit" name="submit" id="submit" value="submit">
    <input type="reset" name="reset" id="reset" value="reset">
  </form>
</body>
</html>
<?php
error_reporting(0);
if(isset($_POST["submit"]))
```

```
{
  $str1=$_POST["str1"];
  $str2=$_POST["str2"];
  $choice=$_POST["select"];
  switch ($choice) {
    case 'compare':
      if(strcmp($str1,$str2)>0)
      {
        echo"<b>".$str1."</b>"." string is greater";
      }else if(strcmp($str1,$str2)<0){</pre>
         echo"<b>".$str2."</b>"." string is greater";
      }else{
        echo"both strings are equal!";
      }
      break;
    case 'uppercase':
      $up1=strtoupper($str1);
      $up2=strtoupper($str2);
      echo"uppercase strings are:".$up1." ".$up2;
      break;
    case 'lowercase':
      $lo1=strtolower($str1);
      $lo2=strtolower($str2);
      echo"lowercase strings are:".$lo1." ".$lo2;
      break;
  }
}
?>
```

- 2. Write a PHP script to perform the following operations on string:
- i) Convert each word of a string to Lowercase and Uppercase.
- ii) Find the first and last occurrence of string2 in string1.

```
HTML & PHP CODE:
```

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <form action="#" method="POST">
    <label for="str1"><b>Enter first string:</b></label>
    <input type="text" name="str1" id="str1"><br>
    <br>
    <label for="str2"><b>Enter second string:</b></label>
    <input type="text" name="str2" id="str2"><br>
    <br>
    <label for="select"><b>Select choice:</b></label>
    <select name="select" id="select">
      <option value="lowercase">convert each word into lowercase
      <option value="uppercase">convert each word into uppercase/option>
      <option value="occurrences">find first and last occurrences of string 2 in string1/option>
    </select><br>
    <br>
    <input type="submit" name="submit" id="submit" value="submit">
    <input type="reset" name="reset" id="reset" value="reset">
  </form>
</body>
```

```
</html>
<?php
error_reporting(0);
if(isset($_POST["submit"]))
{
  $str1=$_POST["str1"];
  $str2=$_POST["str2"];
  $choice=$_POST["select"];
  switch ($choice) {
    case 'lowercase':
         echo"The first string is :".lcfirst($str1)."<br>";
         echo"The second string is :".lcfirst($str2);
      break;
    case 'uppercase':
      echo"The first string is :".ucfirst($str1)."<br>";
         echo"The second string is :".ucfirst($str2);
      break;
    case 'occurrences':
      $len=strlen($str2);
      $cf=0;
      $cl=0;
      echo$str2[$len-1]."<br>";
      echo$str2[0]."<br>";
      for($i=0;$i<strlen($str1);$i++)
      {
         if($str2[$len-1]==$str1[$i])
         {
           $cl++;
         }else if($str2[0]==$str1[$i])
         {
```

```
$cf++;
}

echo"first count is:".$cf."<br>";
echo"last count is:".$cl."<br>";
break;
}
```

-----

3. Write a menu-driven program in PHP to perform the following operations on associative arrays:

- i) Sort the array by values (changing the keys) in ascending, descending order.
- ii) Also, sort the array by values without changing the keys.
- iii) Find the intersection of two arrays.
- iv) Find the union of two arrays.

```
HTML & PHP CODE:
```

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Document</title>
</head>
<body>
<form action="#" method="POST">
<label for="select"><b>Select choice:</b></label>
<select name="select" id="select">
<option value="sort1">sort by value in ascending order</option>
```

```
<option value="sort2">sort by value in descending order/option>
      <option value="intersection">intersection</option>
      <option value="union">union</option>
    </select>
    <br>
    <br>
    <input type="submit" name="submit" id="submit" value="submit">
    <input type="reset" name="reset" id="reset" value="reset">
  </form>
</body>
</html>
<?php
error_reporting(0);
if(isset($_POST["submit"]))
{
  $choice=$_POST["select"];
  $arr1=array("c"=>"choice","k"=>"key","v"=>"value","u"=>"union","i"=>"intersection");
  $arr2=array("c"=>"choice","k"=>"key","v"=>"value","p"=>"php");
  switch ($choice) {
    case 'sort1':
      echo"The original first array is:"."<br>";
      echo"";
      foreach($arr1 as $k=>$v)
      {
        echo$k." "."=>"." ".$v."<br>";
      }
      echo"";
      echo"<br>"."The original second array is:"."<br>";
      echo"";
      foreach($arr2 as $k=>$v)
      {
```

```
echo$k." "."=>"." ".$v."<br>";
  }
  echo"";
  asort($arr1);
  echo"The sorted first array is in ascending order:"."<br>";
  echo"";
  foreach($arr1 as $k=>$v)
  {
    echo$k." "."=>"." ".$v."<br>";
  }
  echo"";
  asort($arr2);
  echo"<br/>
"."The sorted second array is in ascending order:"."<br/>
";
  echo"";
  foreach($arr2 as $k=>$v)
  {
    echo$k." "."=>"." ".$v."<br>";
  }
  echo"";
  break;
case 'sort2':
  echo"The original first array is:"."<br>";
  echo"";
  arsort($arr1);
  foreach($arr1 as $k=>$v)
  {
    echo$k." "."=>"." ".$v."<br>";
  }
  echo"";
  echo"<br>"."The original second array is:"."<br>";
  echo"";
```

```
arsort($arr1);
  foreach($arr1 as $k=>$v)
  {
    echo$k." "."=>"." ".$v."<br>";
  }
  echo"";
  echo"The sorted first array is in descending order:"."<br>";
  echo"";
  foreach($arr1 as $k=>$v)
  {
    echo$k." "."=>"." ".$v."<br>";
  }
  echo"";
  arsort($arr2);
  echo"<br/>sorted second array is in descending order:"."<br/>br>";
  echo"";
  foreach($arr2 as $k=>$v)
  {
    echo$k." "."=>"." ".$v."<br>";
  }
  echo"";
  break;
case 'intersection':
  echo"The original first array is:"."<br>";
  echo"";
  foreach($arr1 as $k=>$v)
  {
    echo$k." "."=>"." ".$v."<br>";
  }
  echo"";
  echo"<br/>"."The original second array is:"."<br/>';
```

```
echo"";
 foreach($arr2 as $k=>$v)
 {
   echo$k." "."=>"." ".$v."<br>";
 }
 echo"";
 echo"<br>";
 echo"Intersection of two arrays are:"."<br>";
 echo"";
 $arr3=array_intersect_assoc($arr1,$arr2);
 foreach($arr3 as $k=>$v)
 {
   echo$k." "."=>"." ".$v."<br>";
 }
 echo"";
 break;
case 'union':
 echo"The original first array is:"."<br>";
 echo"";
 foreach($arr1 as $k=>$v)
 {
   echo$k." "."=>"." ".$v."<br>";
 }
 echo"";
 echo"<br>"."The original second array is:"."<br>";
 echo"";
 foreach($arr2 as $k=>$v)
 {
   echo$k." "."=>"." ".$v."<br>";
 }
 echo"";
```

```
echo"<br/>
echo"Union of two arrays are:"."<br/>
echo"";
    $arr3=array_merge($arr1,$arr2);
    $arr3=array_unique($arr3);
    foreach($arr3 as $k=>$v)
    {
        echo$k." "."=>"." ".$v."<br>";
    }
    echo"";
    break;
}

}
```

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### **SET C:**

- 1. Write a PHP script to perform the following operations on string:
- i) Replace the string2 by string3 in string1.
- ii) Reverse and display the string.

```
HTML & PHP CODE:
```

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Document</title>
</head>
<body>
<form action="#" method="POST">
```

```
<label for="str1"><b>Enter main string:</b></label>
    <input type="text" name="str1" id="str1"><br>
    <br>
    <label for="str2"><b>Enter find string:</b></label>
    <input type="text" name="str2" id="str2"><br>
    <br>
    <label for="r"><b>Enter replace string:</b></label>
      <input type="text" name="r" id="r"><br>
      <br>
    <label for="select"><b>Select choice:</b></label>
    <select name="select" id="select">
      <option value="replace">replace string2 by string 3 in string 1/option>
      <option value="reverse">reverse and display string/option>
    </select><br>
    <br>
    <input type="submit" name="submit" id="submit" value="submit">
    <input type="reset" name="reset" id="reset" value="reset">
  </form>
</body>
</html>
<?php
if(isset($_POST["submit"]))
  $str1=$_POST["str1"];
  $str2=$_POST["str2"];
  $str3=$_POST["r"];
  $choice=$_POST["select"];
  switch ($choice) {
    case 'replace':
      echo"first string is:".$str1."<br>";
```

{

```
echo"second string is:".$str2."<br>";
echo"third string is:".$str3."<br/>$size=strlen($str1);
echo"replace string is:".str_replace($str2,$str3,$str1,$size)."<br/>break;
case 'reverse':
echo"First reverse string is:".strrev($str1)."<br/>echo"second reverse string is:".strrev($str2)."<br/>break;
}
```

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