**EXPERIMENT NO. 03**

**Title:** Array and Function in PHP

**Aim:** To understand and apply the concepts of Array and Function in PHP Language.

**Objective:** To implement the program on Array and Function in PHP

**Contents:**

* **Arrays in PHP**
  + What is an array?
  + Types of Array in PHP
    - [Indexed arrays](https://www.w3schools.com/php/php_arrays_indexed.asp) - Arrays with a numeric index
    - [Associative arrays](https://www.w3schools.com/php/php_arrays_associative.asp) - Arrays with named keys
    - [Multidimensional arrays](https://www.w3schools.com/php/php_arrays_multidimensional.asp)- Arrays containing one or more arrays
  + Creating arrays
  + Accessing elements of arrays
  + Inserting elements into arrays
  + Sorting arrays
  + Moving pointer through PHP arrays
  + Stack and Queue functionality of arrays
  + Computation functions in arrays
  + Intersection and Union in PHP arrays
  + Finding Minimum and Maximum from arrays
* **Function in PHP** 
  + What is Function.
  + Elements of Function
  + Calling external function in PHP script

**Problem Statements to perform in lab:**

**Array:**

## Problem Stmt1 : Perform the following ,

## Create the indexed array with list of Friend names.

## Traversing the created Indexed Array above using foreach loop

## Retrieving the particular element of an array

## Retrieves range of elements from an array using array\_slice()

## Insert the additional element into the array

## Display the entire array element using 1) print\_r() and 2) var\_dump()

## Count an array elements using count () and sizeof()

## Find the occurrence of each value in an array suing array\_count\_values()

## Sort the array elements using sort () , assort() and rsort()

## Move pointer through the array using i) current()

## ii) next()

## iii) prev()

## iv) end()

## v) reset()

## create the array with elements 23,4,5,4,5,23,5,67,23 and remove duplicate elements using array\_unique()

## Problem Stmt2: Perform the following,

## Create the [Associative arrays](https://www.w3schools.com/php/php_arrays_associative.asp) array with list of month number and Month name up-to 11 month

## (Key🡪 Data)

## Insert the 12th month in above array

## Retrieving the particular element of an array based on key

## Display the entire array element using 1) print\_r() and 2) var\_dump()

## lopping through an associative array by using each() and list() function

## Swap the Keys and Values in array using array\_flip()

## Check the existence of any value and key using in\_array() and array\_key\_exists()

## Retrieving the key based on value of any element using array\_search()

## Problem Stmt3: Perform the following,

## create the multidimensional array(Nested arrays) (e.g..)

|  |  |  |  |
| --- | --- | --- | --- |
| Roll | Name | Class | Marks |
| 1 | ABC | TY | 97 |
| 2 | XYZ | SY | 89 |
| 3…… |  |  |  |

## Access the particular array element

## Access all the array element using nested for loop

## Displaying an array elements by using print\_r() and var\_dump()

## Problem Stmt4: Queue functionality of Array (First in-first out manner)

## Create the array with 10 numbers

* Remove first element from an array using array\_shift()
* Add element at beginning of an array by using array\_unshift()

## Problem Stmt5: Stack functionality of Array (Last in First out Manner)

## Create the array with 10 numbers

## add element to the end of an array using array\_push()

## removes the last element from an array array\_pop()

## Problem Stmt 6: min() and max() function in array

## Take arrays of marks of 3 subjects (for 10 students) ( i.e 3 arrays of 10 values)

## Find the maximum marks among all subjects

## Find the minimum marks among all subjects

**Function:**

## Problem Stmt6: check whether entered number is palindrome or not using user defined function.

## Problem Stmt7: Write the PHP code for user defined function

## Take one email\_id as input from user.

## Call user defined check\_email function with parameter to check whether the entered email is valid or not.

## Inside function body use call standard library function preg\_match() to check whether entered string is in format of email.

## Print final decision Valid/Invalid

## Problem Stmt8: Find the Factorial program in PHP using recursive function

**Conclusion:**

Write the crux of the experiment. Here crux means very important point, complicated and again it should be understandable by you. Do not write conclusion like thus we have studied the ……… in PHP programming.