## ID code: 19CM029 Name: Dhiraj Jagtap Sem: 5th

## Practical No: 02

**Write a PHP program to demonstrate the use of Decision making control structures using-**

## If statement

1. **If-else statement**

## Switch statement

**I Practical Significance:**

In computer science, conditional statements, expressions and constructs are perform different computations or actions depending on whether Boolean condition evaluates to true or false. Students will be able to use various forms of if statements to check the condition.

## Relevant Program Outcomes (POs)

* + **Basic Knowledge:** Apply knowledge of basic mathematics, sciences and basic engineering to solve the computer group related problem.
  + **Discipline Knowledge:** Apply computer programming knowledge to slove the computer group related problems.
  + **Experiments and practices:** Plan to perform experiments and practices to use the result to solve the computer group related problems.
  + **Engineering tools:** Apply relevant Computer programming technologies and tools with an understanding of the limitations.
  + **Individual and Teamwork:** Function effectively as a leader and the team member in diverse/multidisciplinary teams.
  + **Communication:** Communicate effectively in oral and written form.

## Competency and Practical skills:

**“Develop application using PHP”**

This practical is expected to develop the following skills.

Write a program to use simple if statements to check conditions

Develop a program to use different forms of if to check multiple condition Write a program to using switch statement.

## Relevant Course Outcome(s):

CO1 Develop a program using control statement.

## Practical Outcome (PrOs) :

Write a program to use simple if statements to check conditions.

Develop a program to use different forms of if to check multiple conditions. Write a program to using switch statement.

## Relevant Affective domain related Outcome(s)

1. Follow safety practices.
2. Practice good housekeeping
3. Demonstrate working as a leader/ a team member.
4. Follow ethical practices.

## Minimum Theoretical Background:

Controls statements are used to control are used to control the flow of execution of program based on certain conditions. These are used to cause the flow of execution to advance and branch based on changes to the state of program.

1. if statement
2. if-else statement
3. If..elseif..else statement
4. **if:** if statement is simple decision making statement. It is used to decide whether a certain statement or block of statements will be executed or not. i.e. if a certain condition is true then the block will be executed otherwise not.

Syntax:

if(condition)

{

//Statement to execute if the condition is true.

}

1. **if-else statement:** The if statement alone tells us that if a condition is true it will execute a block of statements and if the condition false, else block will be executed.

if( condition)

{

//Statement to execute if the condition is true

}

else

{

//Statement to execute if the condition is false

}

## switch statement

The switch statement is used to perform different actions based on different conditions. Use the switch statement to select one of many blocks of code to be executed.

switch(n)

{

case label1:

//code to be executed if n=label1; break;

case label2:

//code to be executed if n=label2; break;

case label3:

//code to be executed if n=label3; break;

...

default:

//code to be executed if n is different from all labels;

}

## VII. Resources Required Nill

1. **Resources used:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. no.** | **Name of Resources** | **Suggested Broad Specification** | **Quantity** | **Remark** |
| 1 | Computer System with board specifications |  |  |  |
| 2 | Software |  |  |  |
| 3 | Any other resource  used |  |  |  |

## Program Code: Teacher must assign a separate program statement to group of 3-4 students. Write a program to find given number is even or odd.

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## Result ( Output of code )

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## Practical Related Questions:

### Note: Below given are few sample questions for reference. Teacher must design more such questions so as to ensure the achievement of identified CO.

* 1. List operators used in if conditional statement.
  2. In if-else construct which part will be executed if condition is true.
  3. State the condition when the else part will be executed with example.

(Space for Answer)

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## Exercise

* 1. Write a program to make the use of logical operators.
  2. Write a program to check no is positive or negative.
  3. Write a calendar program using switch statement.

(Space for Answer)

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## References/ Suggestions for Futher Reading.

1. https:/[/www](http://www.w3schools.com/php/default.asp).[w3schools.com/php/default.asp](http://www.w3schools.com/php/default.asp)
2. https:/[/www](http://www.guru99.com/what-is-php-program.html).[guru99.com/what-is-php-program.html](http://www.guru99.com/what-is-php-program.html)
3. https:/[/www](http://www.tutorialspoint.com/php/).[tutorialspoint.com/php/](http://www.tutorialspoint.com/php/)
4. https://tutorialehtml.com/en/php-tutorial-introduction/
5. [www.tizag.com/phpT/](http://www.tizag.com/phpT/)
6. https://books.goalkicker.com/PHPBook/
7. https://codecourse.com/watch/php-basics

## Assessment Scheme

|  |  |  |
| --- | --- | --- |
| **Performance Indicators** | | **Weightage** |
| **Process related ( 35 marks)** | | **70%** |
| **1** | **Logical formation** | **30%** |
| **2** | **Debugging ability** | **30%** |
| **3** | **Follow ethical practices** | **10%** |
| **Product related (15 marks)** | | **30%** |
| **4** | **Expected output** | **10%** |
| **5** | **Timely submission of report** | **10%** |
| **6** | **Answer to sample questions** | **10%** |
| **Total ( 50 Marks)** | | **100%** |

### List of Students/ Team Members

**1.** ………………………………………………………

**2.** ………………………………………………………

**3.** ………………………………………………………

**4.** ………………………………………………………

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| --- | --- | --- | --- |
| **Marks obtained** | | | **Dated signature of**  **Teacher** |
| **Process**  **Related(35)** | **Product**  **Related(15)** | **Total(50)** |  |
|  |  |  |

## Practical No: 03

**Write a PHP program to demonstrate the use of Looping structures using-**

## While statement

1. **Do-while statement**

## For statement

1. **Foreach statement**

## I Practical Significance:

Loop is used in programming to repeat a specific block of code until certain condition is true. Students will be able to use while and do-while loop to replace the repetition of statements.

## Relevant Program Outcomes (POs)

* + **Basic Knowledge:** Apply knowledge of basic mathematics, sciences and basic engineering to solve the computer group related problem.
  + **Discipline Knowledge:** Apply computer programming knowledge to slove the computer group related problems.
  + **Experiments and practices:** Plan to perform experiments and practices to use the result to solve the computer group related problems.
  + **Engineering tools:** Apply relevant Computer programming technologies and tools with an understanding of the limitations.
  + **Individual and Teamwork:** Function effectively as a leader and the team member in diverse/multidisciplinary teams.
  + **Communication:** Communicate effectively in oral and written form.

## Competency and Practical skills:

**“Develop application using PHP”**

This practical is expected to develop the following skills.

1. Develop a program to using for loop.
2. Develop a program to using foreach loop.
3. Develop a program to using while and do-while loop.

## Relevant Course Outcome(s):

CO1 Develop a program using control statement.

## Practical Outcome (PrOs) :

1. Develop a program to using for loop.
2. Develop a program to using foreach loop.
3. Develop a program to using while and do-while loop

## Relevant Affective domain related Outcome(s)

1. Follow safety practices.
2. Practice good housekeeping
3. Demonstrate working as a leader/ a team member.
4. Follow ethical practices.

## Minimum Theoretical Background:

1. **While loop**

while (condition is true)

{

//code to be executed;

}

## Do..While loop

do

{

//code to be executed;

} while (condition is true);

## For loop

for (init counter; test counter; increment counter)

{

//code to be executed for each iteration;

}

## 4.

**VII. Resources Required Nill**

## Resources used:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. no.** | **Name of Resources** | **Suggested Broad Specification** | **Quantity** | **Remark** |
| 1 | Computer System with board specifications |  |  |  |
| 2 | Software |  |  |  |
| 3 | Any other resource  used |  |  |  |

1. **Program Code: Teacher must assign a separate program statement to group of 3-4 students. Write a program to print first 30 even numbers. (Using for, while, do..while)**

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## Practical Related Questions:

### Note: Below given are few sample questions for reference. Teacher must design more such questions so as to ensure the achievement of identified CO.

* 1. When for loop will be terminated?
  2. Difference between for and for-each loop

(Space for Answer)

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## Exercise

* 1. Write any program using if condition with for loop.
  2. Write a program to display pyramids of star/patterns using increment/decrement.

(Space for Answer)

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## References/ Suggestions for Futher Reading.

* 1. https:/[/www](http://www.w3schools.com/php/default.asp).[w3schools.com/php/default.asp](http://www.w3schools.com/php/default.asp)
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  6. https://books.goalkicker.com/PHPBook/
  7. https://codecourse.com/watch/php-basics

## Assessment Scheme

|  |  |  |
| --- | --- | --- |
| **Performance Indicators** | | **Weightage** |
| **Process related ( 35 marks)** | | **70%** |
| **1** | **Logical formation** | **30%** |
| **2** | **Debugging ability** | **30%** |
| **3** | **Follow ethical practices** | **10%** |
| **Product related (15 marks)** | | **30%** |
| **4** | **Expected output** | **10%** |
| **5** | **Timely submission of report** | **10%** |
| **6** | **Answer to sample questions** | **10%** |
| **Total ( 50 Marks)** | | **100%** |

### List of Students/ Team Members

**1.** ………………………………………………………

**2.** ………………………………………………………

**3.** ………………………………………………………

**4.** ………………………………………………………

|  |  |  |  |
| --- | --- | --- | --- |
| **Marks obtained** | | | **Dated signature of**  **Teacher** |
| **Process**  **Related(35)** | **Product**  **Related(15)** | **Total(50)** |  |
|  |  |  |

## Practical No: 04

**Write a PHP program for creating and manipulating-**

## Indexed array

1. **Associative array**

## Multidimensional array

**I Practical Significance:**

Array in PHP is a type of data structure that allows us to store multiple elements of similar data types under a single variable thereby saving us the effort of creating a different variable for every data.

## Relevant Program Outcomes (POs)

* + **Basic Knowledge:** Apply knowledge of basic mathematics, sciences and basic engineering to solve the computer group related problem.
  + **Discipline Knowledge:** Apply computer programming knowledge to slove the computer group related problems.
  + **Experiments and practices:** Plan to perform experiments and practices to use the result to solve the computer group related problems.
  + **Engineering tools:** Apply relevant Computer programming technologies and tools with an understanding of the limitations.
  + **Individual and Teamwork:** Function effectively as a leader and the team member in diverse/multidisciplinary teams.
  + **Communication:** Communicate effectively in oral and written form.

## Competency and Practical skills:

**“Develop application using PHP”**

Write a PHP program for creating and manipulating-

1. Indexed array
2. Associative array
3. Multidimensional array

## Relevant Course Outcome(s):

CO2 : Perform operations based on arrays and graphics.

## Practical Outcome (PrOs) :

1. Develop a program to using Indexed array.
2. Develop a program to using Associative array.
3. Develop a program to using Multidimensional array.

## Relevant Affective domain related Outcome(s)

1. Follow safety practices.
2. Practice good housekeeping
3. Demonstrate working as a leader/ a team member.
4. Follow ethical practices.

## Minimum Theoretical Background:

There are basically three types of arrays in PHP:

**Indexed or Numeric Arrays:** An array with a numeric index where values are stored linearly.

**Associative Arrays:** An array with a string index where instead of linear storage, each value can be assigned a specific key.

**Multidimensional Arrays:** An array which contains single or multiple array within it and can be accessed via multiple indices.

## Indexed or Numeric Arrays:

These type of arrays can be used to store any type of elements, but an index is always a number. By default, the index starts at zero.

$cars = array(“Volvo”,”BMW”,”Toyota”); OR

The index can be assigned manually:

$cars[0] = “Volvo”;

$cars[1] = “BMW”;

$cars[2] = “Toyota”;

The following example creates an indexed array name $cars, assigns three elements to it, and then prints a text containing the array values:

<?php

$cars= array("Volvo", "BMW", "Toyota");

echo "I like " . $cars[0] . ", " . $cars[1] . " and " . $cars[2] . ".";

?>

## Loop Through an Indexed Array

To loop through and print all the values of an indexed array, you could use loop, like this:

<?php

$cars= array("Volvo", "BMW", "Toyota");

$arrlength=count($cars);

for($x= 0;$x<$arrlength;$x++)

{

echo $cars[$x]; echo "<br>";

}

?>

## Associative arrays:

Associative arrays are arrays that use named keys that you assign to them. There are two ways to create an associative array:

$total = array(“fyif”=> “58”, “syif” => “61”, “tyif”=> “46”); OR

$total[‘fyif’]= “58”;

$total[‘syif’]= “61”;

$total[‘tyif’]= “46”;

The named keys can then be used in a script

<html>

<body>

<?php

$total = array("fyif"=>"58", "syif"=>"58", "tyif"=>"46"); echo "Total student in TYIF:".$total['tyif'];

?>

</body>

</html>

## Loop Through an Associative Array

To loop through and print all the values of an associative array, you could use a foreach loop, like this:

<html>

<body>

<?php

$total = array("fyif"=>"58", "syif"=>"61", "tyif"=>"46"); foreach($total as $x => $x\_value)

{

echo "Key=" . $x . ", Value=" . $x\_value; echo "<br>";

}

?>

</body>

</html>

## PHP Multidimensional Array

A two-dimensional array is an array of arrays (a three-dimensional array is an array of arrays of arrays).

## Example:

$student = array (

array("xyz",3401,86.45),

array("abc",3402,87.42),

array("pqr",3403,85.43),

);

## <html>

**<body>**

## <?php

**$student = array (**

## array("XYZ",3401,86.45),

**array("ABC",3402,87.42),**

## array("PQR",3403,85.43),

**);**

## echo "Student Name:".$student[0][0].": Roll No: ".$student[0][1].", Percentage: ".$student[0][2].".<br>";

**echo "Student Name:".$student[1][0].": Roll No: ".$student[1][1].", Percentage: ".$student[1][2].".<br>";**

## echo "Student Name:".$student[2][0].": Roll No: ".$student[2][1].", Percentage: ".$student[2][2].".<br>";

**?>**

## </body>

**</html>**

We can also put a for loop inside another for loop to get the elements of the $student array:

## <html>

**<body>**

## <?php

**$student = array (**

## array("XYZ",3401,86.45),

**array("PQR",3402,87.42),**

## array("ABC",3403,85.43),

**);**

## for ($row = 0; $row < 3; $row++) {

**echo "<p><b>Row number $row</b></p>"; echo "<ul>";**

## for ($col = 0; $col < 3; $col++) {

**echo "<li>".$student[$row][$col]."</li>";**

## }

**echo "</ul>";**

## }

**?>**

## </body>

**</html>**

## VII. Resources Required Nill

1. **Resources used:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. no.** | **Name of Resources** | **Suggested Broad Specification** | **Quantity** | **Remark** |
| 1 | Computer System with board specifications |  |  |  |
| 2 | Software |  |  |  |
| 3 | Any other resource  used |  |  |  |

## Program Code: Teacher must assign a separate program statement to group of 3-4 students.

**Develop a program to using Indexed array.**

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## Result ( Output of code )

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## Practical Related Questions:

### Note: Below given are few sample questions for reference. Teacher must design more such questions so as to ensure the achievement of identified CO.

* 1. How to create an array in PHP with syntax and small example.
  2. List the types of array used in PHP.

(Space for Answer)

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## Exercise

* 1. Develop a program to using Associative array.
  2. Develop a program to using Multidimensional array.

(Space for Answer)

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## References/ Suggestions for Futher Reading.

* 1. https:/[/www](http://www.w3schools.com/php/default.asp).[w3schools.com/php/default.asp](http://www.w3schools.com/php/default.asp)
  2. https:/[/www](http://www.guru99.com/what-is-php-program.html).[guru99.com/what-is-php-program.html](http://www.guru99.com/what-is-php-program.html)
  3. https:/[/www](http://www.tutorialspoint.com/php/).[tutorialspoint.com/php/](http://www.tutorialspoint.com/php/)
  4. https://tutorialehtml.com/en/php-tutorial-introduction/
  5. [www.tizag.com/phpT/](http://www.tizag.com/phpT/)
  6. https://books.goalkicker.com/PHPBook/
  7. https://codecourse.com/watch/php-basics

## Assessment Scheme

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| --- | --- | --- |
| **Performance Indicators** | | **Weightage** |
| **Process related ( 35 marks)** | | **70%** |
| **1** | **Logical formation** | **30%** |
| **2** | **Debugging ability** | **30%** |
| **3** | **Follow ethical practices** | **10%** |
| **Product related (15 marks)** | | **30%** |
| **4** | **Expected output** | **10%** |
| **5** | **Timely submission of report** | **10%** |
| **6** | **Answer to sample questions** | **10%** |
| **Total ( 50 Marks)** | | **100%** |

### List of Students/ Team Members

**1.** ………………………………………………………

**2.** ………………………………………………………

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**4.** ………………………………………………………

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| **Marks obtained** | | | **Dated signature of**  **Teacher** |
| **Process**  **Related(35)** | **Product**  **Related(15)** | **Total(50)** |  |
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## Practical No: 05

1. **Write a PHP program to-**

## Calculate length of string.

* + **Count the number of words in string without using string functions.**

## Write a simple PHP program to demonstrate use of various built-in string functions. I Practical Significance:

String is a sequence of characters. Students will be able to perform various operations on String using different methods.

## Relevant Program Outcomes (POs)

* + **Basic Knowledge:** Apply knowledge of basic mathematics, sciences and basic engineering to solve the computer group related problem.
  + **Discipline Knowledge:** Apply computer programming knowledge to slove the computer group related problems.
  + **Experiments and practices:** Plan to perform experiments and practices to use the result to solve the computer group related problems.
  + **Engineering tools:** Apply relevant Computer programming technologies and tools with an understanding of the limitations.
  + **Individual and Teamwork:** Function effectively as a leader and the team member in diverse/multidisciplinary teams.
  + **Communication:** Communicate effectively in oral and written form.

## Competency and Practical skills:

**“Develop application using PHP”**

* + Write a PHP program to-
    - Calculate length of string.
    - Count the number of words in string without using string functions.
  + Write a simple PHP program to demonstrate use of various built-in string functions.

## Relevant Course Outcome(s):

CO2 : Perform operations based on arrays and graphics.

## Practical Outcome (PrOs) :

1. Write a PHP program to-
   * Calculate length of string.
   * Count the number of words in string without using string functions.
2. Write a simple PHP program to demonstrate use of various built-in string functions.

## Relevant Affective domain related Outcome(s)

1. Follow safety practices.
2. Practice good housekeeping
3. Demonstrate working as a leader/ a team member.
4. Follow ethical practices.

## Minimum Theoretical Background:

PHP String function.

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr.**  **No.** | **PHP function** | **Use** | **Example** |
| 1 | strlen() | The PHP strlen() function returns the length of a string. | echo strlen("Hello world!"); |
| 2 | str\_word\_count() | The PHP str\_word\_count() function counts the  number of words in a string. | echo str\_word\_count("Hello world!"); |
| 3 | strrev() | The PHP strrev() function reverses a string. | echo strrev("Hello world!"); |
| 4 | strpos() | The PHP strpos() function searches for a specific text within a string. If a match is found, the function returns the character position of the first match. If no match is found, it will return FALSE. | echo strpos("Hello world!", "world"); // outputs 6 |
| 5 | str\_replace() | The PHP str\_replace() function replaces some characters with some other characters in a string. | echo str\_replace("world", "bvit", "Hello world!"); // outputs Hello bvit! |
| 6 | ucwords() | Convert the first character of each word to uppercase | echo ucwords("Welcome to php world");// Welcome To Php World |
| 7 | strtoupper() | Convert a string a uppercase letters | echo strtoupper("information technology");// INFORMATION  TECHNOLOGY |
| 8 | strtolower() | Convert a string to lowercase letters | echo strtolower("INFORMATION TECHNOLOGY")// information  technology |
| 9 | str\_repeat() | Repeating a string with a specific number of  times | echo  str\_repeat("\*",10);//\*\*\*\*\*\*\*\*\*\* |
| 10 | strcmp() | Compare two strings (case-sensitive). If this function return 0, the two strings are equals. If this function returns any negative or positive nubers, the two strings | echo strcmp("Hello world!", "Hello world"); //0 |

## VII. Resources Required Nill

1. **Resources used:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. no.** | **Name of Resources** | **Suggested Broad Specification** | **Quantity** | **Remark** |
| 1 | Computer System with board specifications |  |  |  |
| 2 | Software |  |  |  |
| 3 | Any other resource  used |  |  |  |

## Program Code: Teacher must assign a separate program statement to group of 3-4 students.

* 1. Write a PHP program to-
     + Calculate length of string.
     + Count the number of words in string without using string functions.

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## Practical Related Questions:

### Note: Below given are few sample questions for reference. Teacher must design more such questions so as to ensure the achievement of identified CO.

List **string functions** with syntax and small example.

Space for Answer)

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## Exercise

Write a program to demonstrate PHP maths function.

(Space for Answer)

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  2. https:/[/www](http://www.guru99.com/what-is-php-program.html).[guru99.com/what-is-php-program.html](http://www.guru99.com/what-is-php-program.html)
  3. https:/[/www](http://www.tutorialspoint.com/php/).[tutorialspoint.com/php/](http://www.tutorialspoint.com/php/)
  4. https://tutorialehtml.com/en/php-tutorial-introduction/
  5. [www.tizag.com/phpT/](http://www.tizag.com/phpT/)
  6. https://books.goalkicker.com/PHPBook/
  7. https://codecourse.com/watch/php-basics

## Assessment Scheme

|  |  |  |
| --- | --- | --- |
| **Performance Indicators** | | **Weightage** |
| **Process related ( 35 marks)** | | **70%** |
| **1** | **Logical formation** | **30%** |
| **2** | **Debugging ability** | **30%** |
| **3** | **Follow ethical practices** | **10%** |
| **Product related (15 marks)** | | **30%** |
| **4** | **Expected output** | **10%** |
| **5** | **Timely submission of report** | **10%** |
| **6** | **Answer to sample questions** | **10%** |
| **Total ( 50 Marks)** | | **100%** |

### List of Students/ Team Members

**1.** ………………………………………………………

**2.** ………………………………………………………

**3.** ………………………………………………………

**4.** ………………………………………………………

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| --- | --- | --- | --- |
| **Marks obtained** | | | **Dated signature of**  **Teacher** |
| **Process**  **Related(35)** | **Product**  **Related(15)** | **Total(50)** |  |
|  |  |  |

## Practical No: 06

Write a simple PHP program to demonstrate use of simple function and parameterized function.

## I Practical Significance:

The real power of PHP comes from its functions. PHP has more than built-in functions, and in addition you can create your own custom functions. PHP has over 1000 built-in functions that can be called directly, from within a script, to perform a specific task.

## Relevant Program Outcomes (POs)

* + **Basic Knowledge:** Apply knowledge of basic mathematics, sciences and basic engineering to solve the computer group related problem.
  + **Discipline Knowledge:** Apply computer programming knowledge to slove the computer group related problems.
  + **Experiments and practices:** Plan to perform experiments and practices to use the result to solve the computer group related problems.
  + **Engineering tools:** Apply relevant Computer programming technologies and tools with an understanding of the limitations.
  + **Individual and Teamwork:** Function effectively as a leader and the team member in diverse/multidisciplinary teams.
  + **Communication:** Communicate effectively in oral and written form.

## Competency and Practical skills:

**“Develop application using PHP”**

* + Write a simple PHP program to demonstrate use of simple function and parameterized function.

## Relevant Course Outcome(s):

CO2: Perform operations based on arrays and graphics.

## Practical Outcome (PrOs) :

* + Write a simple PHP program to demonstrate use of simple function and parameterized function.

.

## Relevant Affective domain related Outcome(s)

1. Follow safety practices.
2. Practice good housekeeping
3. Demonstrate working as a leader/ a team member.
4. Follow ethical practices.

## Minimum Theoretical Background:

**Functions and types.**

* + PHP functions are similar to other programming languages. A function is a piece of code which takes one more input in the form of parameter and does some processing and returns a value.
  + They are built-in functions but PHP gives you option to create your own functions as well. A function will be executed by a call to the function. You may call a function from anywhere within a page.
  + Syntax:

function function\_name()

{

//body of function.

}

Function Types

1. Simple function
2. Function with parameter
3. Anonymous function.

**Example of Simple function:**

<html>

<body>

<?php

// Defining a PHP functions function writeMessage()

{

echo “Welcome to PHP world”;

}

// Calling a PHP function. writeMessage();

?>

</body>

</html>

**Example of PHP function with Parameters:**

<?php

function addfunc($num1,$num2)

{

$num=$num1+$num2;

echo “Sum of the two numbers is ”.$sum;

}

addfunc(50,20);

## ?>

**Anonymous function**

Anonymous functions allow to creation of functions which have no specified name.

**Example:**

<?php

//Defining Anonymous function

$a=function() {

echo "Anonymous function";

};

//Calling Anonymous function

$a();

?>

## VII. Resources Required Nill

1. **Resources used:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. no.** | **Name of Resources** | **Suggested Broad Specification** | **Quantity** | **Remark** |
| 1 | Computer System with board specifications |  |  |  |
| 2 | Software |  |  |  |
| 3 | Any other resource  used |  |  |  |

## Program Code: Teacher must assign a separate program statement to group of 3-4 students.

* Write a program to demonstrate anonymous function.

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## Practical Related Questions:

### Note: Below given are few sample questions for reference. Teacher must design more such questions so as to ensure the achievement of identified CO.

* 1. Define anonymous function.
  2. Write a syntax of anonymous function.

( Space for Answer)

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## Exercise

* 1. Write a program to demonstrate parameterized function.

(Space for Answer)

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## References/ Suggestions for Futher Reading.

* 1. https:/[/www](http://www.w3schools.com/php/default.asp).[w3schools.com/php/default.asp](http://www.w3schools.com/php/default.asp)
  2. https:/[/www](http://www.guru99.com/what-is-php-program.html).[guru99.com/what-is-php-program.html](http://www.guru99.com/what-is-php-program.html)
  3. https:/[/www](http://www.tutorialspoint.com/php/).[tutorialspoint.com/php/](http://www.tutorialspoint.com/php/)
  4. https://tutorialehtml.com/en/php-tutorial-introduction/
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  6. https://books.goalkicker.com/PHPBook/
  7. https://codecourse.com/watch/php-basics

## Assessment Scheme

|  |  |  |
| --- | --- | --- |
| **Performance Indicators** | | **Weightage** |
| **Process related ( 35 marks)** | | **70%** |
| **1** | **Logical formation** | **30%** |
| **2** | **Debugging ability** | **30%** |
| **3** | **Follow ethical practices** | **10%** |
| **Product related (15 marks)** | | **30%** |
| **4** | **Expected output** | **10%** |
| **5** | **Timely submission of report** | **10%** |
| **6** | **Answer to sample questions** | **10%** |
| **Total ( 50 Marks)** | | **100%** |

### List of Students/ Team Members

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| **Marks obtained** | | | **Dated signature of**  **Teacher** |
| **Process**  **Related(35)** | **Product**  **Related(15)** | **Total(50)** |  |
|  |  |  |

## Practical No: 07

Write a simple PHP program to create PDF document buy using graphics concepts

## I Practical Significance:

PHP uses a standard code to display the pdf file in web browser. The process of displaying pdf involves location of the PDF file on the server and it uses various types of headers to define content composition in form of type, Disposition, Transfer-Encoding etc

## Relevant Program Outcomes (POs)

* + **Basic Knowledge:** Apply knowledge of basic mathematics, sciences and basic engineering to solve the computer group related problem.
  + **Discipline Knowledge:** Apply computer programming knowledge to slove the computer group related problems.
  + **Experiments and practices:** Plan to perform experiments and practices to use the result to solve the computer group related problems.
  + **Engineering tools:** Apply relevant Computer programming technologies and tools with an understanding of the limitations.
  + **Individual and Teamwork:** Function effectively as a leader and the team member in diverse/multidisciplinary teams.
  + **Communication:** Communicate effectively in oral and written form.

## Competency and Practical skills:

**“Develop application using PHP”**

* + Write a simple PHP program to create PDF document buy using graphics concepts

## Relevant Course Outcome(s):

CO2: Perform operations based on arrays and graphics.

## Practical Outcome (PrOs) :

* + Write a simple PHP program to create PDF document buy using graphics concepts

## Relevant Affective domain related Outcome(s)

1. Follow safety practices.
2. Practice good housekeeping
3. Demonstrate working as a leader/ a team member.
4. Follow ethical practices.

## Minimum Theoretical Background:

* + PHP uses a standard code to display the pdf file in web browser. The process of displaying pdf involves location of the PDF file on the server and it uses various types of headers to define content composition in form of type, Disposition, Transfer-Encoding etc. PHP passes the PDF files to read it on the browser. Browser either shows it or download it from local host server then display pdf.
  + Note: PHP is not actually reading the PDF file. It does not recognize File as pdf. It only passes the PDF file to the browser to be read there. If copy the pdf file inside htdocs folder of XAMPP then it does not need to specify the file path.
  + FPDF is a PHP class which allows to generate PDF files with pure PHP, that is to say without using the PDFlib library. F from FPDF stands for Free: you may use it for any kind of usage and modify it to suit your needs.
  + FPDF has other advantages: high level functions. Here is a list of its main features:

1. Choice of measure unit, page format and margins
2. Page header and footer management
3. Automatic page break
4. Automatic line break and text justification
5. Image support (JPEG, PNG and GIF)
6. Colors
7. Links
8. TrueType, Type1 and encoding support
9. Page compression

**Example:**

<?php require('fpdf.php');

$pdf = new FPDF();

$pdf->AddPage();

$pdf->SetFont('Arial','B',16);

$pdf->Cell(40,10,'Hello World!');

$pdf->Output();

?>

Note: Before executing program download fpdf.php and put into current working directory. Download link: <http://www.fpdf.org/>

## VII. Resources Required

1. **Resources used:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. no.** | **Name of Resources** | **Suggested Broad Specification** | **Quantity** | **Remark** |
| 1 | Computer System with board specifications |  |  |  |
| 2 | Software |  |  |  |
| 3 | Any other resource  used |  |  |  |

## Program Code: Teacher must assign a separate program statement to group of 3-4 students.

* Write a program to create pdf file using PHP.

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## Result ( Output of code )

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## Practical Related Questions:

### Note: Below given are few sample questions for reference. Teacher must design more such questions so as to ensure the achievement of identified CO.

* 1. Write use of various graphics function.

(Space for Answer)

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## References/ Suggestions for Futher Reading.

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  + https://books.goalkicker.com/PHPBook/
  + https://codecourse.com/watch/php-basics

## Assessment Scheme

|  |  |  |
| --- | --- | --- |
| **Performance Indicators** | | **Weightage** |
| **Process related ( 35 marks)** | | **70%** |
| **1** | **Logical formation** | **30%** |
| **2** | **Debugging ability** | **30%** |
| **3** | **Follow ethical practices** | **10%** |
| **Product related (15 marks)** | | **30%** |
| **4** | **Expected output** | **10%** |
| **5** | **Timely submission of report** | **10%** |
| **6** | **Answer to sample questions** | **10%** |
| **Total ( 50 Marks)** | | **100%** |

### List of Students/ Team Members

1………………………………………………………

2………………………………………………………

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|  |  |  |  |
| --- | --- | --- | --- |
| **Marks obtained** | | | **Dated signature of**  **Teacher** |
| **Process**  **Related(35)** | **Product**  **Related(15)** | **Total(50)** |  |
|  |  |  |

## Practical No: 08

Write a PHP program to

1. Inherit members of super class in subclass.
2. Create constructor to initialize object of class by using object oriented concepts.

## I Practical Significance:

Inheritance is a mechanism in which one class acquire property of another class. In PHP, The child class will inherit all the public and protected properties and methods from the parent class. In addition, it can have its own properties and methods. Constructor is special member function whose task to initialize objects of class.

## Relevant Program Outcomes (POs)

* + **Basic Knowledge:** Apply knowledge of basic mathematics, sciences and basic engineering to solve the computer group related problem.
  + **Discipline Knowledge:** Apply computer programming knowledge to slove the computer group related problems.
  + **Experiments and practices:** Plan to perform experiments and practices to use the result to solve the computer group related problems.
  + **Engineering tools:** Apply relevant Computer programming technologies and tools with an understanding of the limitations.
  + **Individual and Teamwork:** Function effectively as a leader and the team member in diverse/multidisciplinary teams.
  + **Communication:** Communicate effectively in oral and written form.

## Competency and Practical skills:

**“Develop application using PHP”**

* + Inherit members of super class in subclass.
  + Create constructor to initialize object of class by using object oriented concepts.

## Relevant Course Outcome(s):

CO3: Develop programs by applying various object oriented concepts.

## Practical Outcome (PrOs) :

* + Write a simple PHP program to demonstrate use of simple function and parameterized function.

## Relevant Affective domain related Outcome(s)

Follow safety practices. Practice good housekeeping

Demonstrate working as a leader/ a team member.

## Minimum Theoretical Background:

**Inheritance:**

* + Inheritance is mechanism of extending an existing class by inheriting class.
  + When we inherit one class from another we say that inherited class is a subclass and the class who has inherits is called parent class.
  + In order to declare that one class inherits the code from another class, we use the extends keyword.

## Syntax:

class Parent

{

// The parent’s class code.

}

class child extends Parent

{

// The class can use the parent’s class code

}

## Example:

<?php class Shape

{

public $length; public $width;

public function\_construct($length,$width)

{

$this->length=$length;

$this->width=$width;

}

}

class Rect extends Shape

{

public $height;

public function construct($length,$width,$height)

{

$this->length =$length;

$this->width=$width;

$this->height=$height;

}

public function intro()

{

echo “This length is {$this->length}, the width is {$this->width}, and the height is {$this-

>height}”;

}

$r=new Rect(10,20,30);

}

$->intro();

?>

**Constructor:**

* + - Constructors are special member functions for initialize variables on the newly created object instances from a class.
    - When creating a new object, it’s useful to setup certain aspects of the object at the same time. For example, you might want to set some properties to initial values fetch some information from a database to populate the object, or register the object in some way.
    - Constructor hava two types

Default and parameterized constructor.

**Example:**

class emp

{

private $fname; private $lname;

public function construct($fname,$lname)

{

$this->fname=$fname;

$this->lname=$lname;

}

public function showName()

{

echo “My name is”.$this->fname.” ”.$this->lname;

}

}

$sid=new emp(“Ramesh”,”Patil”);

$sid->showName();

?>

## VII. Resources Required Nill

1. **Resources used:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. no.** | **Name of Resources** | **Suggested Broad Specification** | **Quantity** | **Remark** |
| 1 | Computer System with board specifications |  |  |  |
| 2 | Software |  |  |  |
| 3 | Any other resource  used |  |  |  |

## Program Code: Teacher must assign a separate program statement to group of 3-4 students.

* Write a program to implements multilevel inheritance.
* Write a program to implements multiple inheritance

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## Result ( Output of code )

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## Practical Related Questions:

### Note: Below given are few sample questions for reference. Teacher must design more such questions so as to ensure the achievement of identified CO.

* 1. How to create a sub class.

2 Define inheritance and its type with diagram.

(Space for Answer)

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## Exercise

* 1. Write a program to demonstrate parameterized constructor.
  2. Write a program to demonstrate default constructor.

(Space for Answer)

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## References/ Suggestions for Futher Reading.

1. https:/[/www](http://www.w3schools.com/php/default.asp).[w3schools.com/php/default.asp](http://www.w3schools.com/php/default.asp)
2. https:/[/www](http://www.guru99.com/what-is-php-program.html).[guru99.com/what-is-php-program.html](http://www.guru99.com/what-is-php-program.html)
3. https:/[/www](http://www.tutorialspoint.com/php/).[tutorialspoint.com/php/](http://www.tutorialspoint.com/php/)
4. https://tutorialehtml.com/en/php-tutorial-introduction/
5. [www.tizag.com/phpT/](http://www.tizag.com/phpT/)
6. https://books.goalkicker.com/PHPBook/
7. https://codecourse.com/watch/php-basics

## Assessment Scheme

|  |  |  |
| --- | --- | --- |
| **Performance Indicators** | | **Weightage** |
| **Process related ( 35 marks)** | | **70%** |
| **1** | **Logical formation** | **30%** |
| **2** | **Debugging ability** | **30%** |
| **3** | **Follow ethical practices** | **10%** |
| **Product related (15 marks)** | | **30%** |
| **4** | **Expected output** | **10%** |
| **5** | **Timely submission of report** | **10%** |
| **6** | **Answer to sample questions** | **10%** |
| **Total ( 50 Marks)** | | **100%** |

### List of Students/ Team Members

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| --- | --- | --- | --- |
| **Marks obtained** | | | **Dated signature of**  **Teacher** |
| **Process**  **Related(35)** | **Product**  **Related(15)** | **Total(50)** |  |
|  |  |  |

## Practical No. 9:

**Write a simple PHP program on Introspection and Serialization.**

## I Practical Significance:

PHP introspection provides useful ability to examine an object’s characteristics. Serialization technique preserves data in a format that can later be restored to its previous form.

## Relevant Program Outcomes (POs)

* + **Basic Knowledge:** Apply knowledge of basic mathematics, sciences and basic engineering to solve the computer group related problem.
  + **Discipline Knowledge:** Apply computer programming knowledge to solve the computer group related problems.
  + **Experiments and practices:** Plan to perform experiments and practices to use the result to solve the computer group related problems.
  + **Engineering tools:** Apply relevant Computer programming technologies and tools with an understanding of the limitations.
  + **Individual and Teamwork:** Function effectively as a leader and the team member in diverse/multidisciplinary teams.
  + **Communication:** Communicate effectively in oral and written form.

## Competency and Practical

**skills: “Develop web page with data validation”**

This practical is expected to develop the following skills.

1. Introspection.
2. Serialization.

## Relevant Course Outcome(s):

CO3: Develop programs by applying various object oriented concepts.

## Practical Outcome (PrOs) :

1. Develop program on Introspection
2. Develop program on Serialization

## Relevant Affective domain related Outcome(s)

1. Work collaboratively in team.
2. Follow ethical practices.

## Minimum Theoretical Background: Introspection

Introspection is the ability of a program to examine an object’s characteristics such as object name, class name, parent class name, method names and so on. With introspection we can write code that operates on any class or object.

Table. Class/Object Functions

|  |  |
| --- | --- |
| **Function** | **Description** |
| get\_class() | Returns the name of the class an object belongs to. |
| get\_parent\_class() | Returns the name of the superclass of the given |
| class\_exists() | Returns TRUE if the string argument is the name of a class, FALSE otherwise. |
| get\_declared\_classes() | Returns an array of strings representing names of classes defined in the current script. |
| is\_subclass\_of() | Returns TRUE if the class of its first argument (an object instance) is a subclass of the second argument (a class name), FALSE otherwise. |
| get\_class\_vars() | Returns an associative array of var/value pairs representing the name of variables in the class and their default values. Variables without default values will not be included. |
| get\_object\_vars() | Returns an associative array of var/value pairs representing the name of variables in the instance and their default values. Variables without values will not be included. |
| method\_exists() | Returns TRUE if the first argument (an instance) has a method named by the second argument (a string) and FALSE otherwise. |
| get\_class\_methods() | Takes a string representing a method name, an instance that should have such a method, and additional arguments. Returns the result of applying the method (and the arguments) to the instance. |

## PHP Introspection program example:

<? php

class Rectangle

{

var $dim1 = 2; var $dim2 = 10;

function Rectangle ($dim1,$dim2)

{

$this->dim1 = $dim1;

$this->dim2 = $dim2;

}

function area()

{

return $this->dim1\*$this->dim2;

}

function display ()

{

// any code to display info

}

}

$S = new Rectangle(4,2);

//get the class varibale i.e properties

$class\_properties = get\_class\_vars ("Rectangle");

//get object properties

$object\_properties = get\_object\_vars ($S);

//get class methods

$class\_methods = get\_class\_methods ("Rectangle");

//get class corresponding to an object

$object\_class = get\_class ($S); print\_r($class\_properties);

print\_r ($object\_properties); print\_r ($class\_methods); print\_r($object\_class);

?>

## Output of above code:-

Array (

[dim1] => 2

[dim2] => 10

)

Array (

[dim1] => 4

[dim2] => 2

)

Array (

[0] => Rectangle

[1] => area

[2] => display

)

Rectangle

## Serialization

Serialization of data means converting it into a string of bytes in such a way that you can produce the original data again from the string via a process as unserialization. After you have the ability to serialize/unserialize, you can store your serialized string anywhere and recreate a copy of the data again when needed.

PHP offers two functions, serialize() and unserialize(), which take a value of any type (except type resource) and encode the value into string form and decode again, respectively.

* **PHP Serialization program example:**

<!DOCTYPE html>

<html>

<body>

<?php

echo " <h4>Serializing the array</h4></br>";

$data = serialize(array("Red", "Green", "Blue")); echo $data **.** "<br>";

echo " <h4>Unserialziing the array</h4></br>";

$test = unserialize($data); var\_dump($test);

?>

</body>

</html>

**Output:**

## Serializing the array

a:3:{i:0;s:3:"Red";i:1;s:5:"Green";i:2;s:4:"Blue";}

## Unserializing the array

array(3) { [0]=> string(3) "Red" [1]=> string(5) "Green" [2]=> string(4) "Blue" }

## VII. Resources Required:

1. **Resources used:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **no.** | **Name of Resources** | **Suggested Broad Specification** | **Quantity** | **Remark** |
| 1 | Computer System with board specifications |  |  |  |
| 2 | Software |  |  |  |
| 3 | Any other resource  used |  |  |  |

## Practical Related Questions.

### Note: Below given are few sample questions for reference. Teacher must design more such questions so as to ensure the achievement of identified CO.

* 1. Explain the concept of introspection in PHP.
  2. Explain serialization in PHP?

(Space for Answer)

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## Exercise

* 1. Develop a PHP code for serialization.
  2. Develop a PHP code for introspection.

(Space for Answer)

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## References/ Suggestions for Further Reading.

* 1. https://[www.w3schools.com/php/default.asp](http://www.w3schools.com/php/default.asp)
  2. https:/[/www.guru99.com/what-is-php-program.html](http://www.guru99.com/what-is-php-program.html)
  3. https://[www.tutorialspoint.com/php/](http://www.tutorialspoint.com/php/)
  4. https://tutorialehtml.com/en/php-tutorial- introduction/
  5. [www.tizag.com/phpT/](http://www.tizag.com/phpT/)
  6. https://books.goalkicker.com/PHPBook/
  7. https://codecourse.com/watch/php-basics

## Assessment Scheme

|  |  |  |
| --- | --- | --- |
| **Performance Indicators** | | **Weightage** |
| **Process related ( 35 marks)** | | **70%** |
| **1** | **Logical formation** | **30%** |
| **2** | **Debugging ability** | **30%** |
| **3** | **Follow ethical practices** | **10%** |
| **Product related (15 marks)** | | **30%** |
| **4** | **Expected output** | **10%** |
| **5** | **Timely submission of report** | **10%** |
| **6** | **Answer to sample questions** | **10%** |
| **Total ( 50 Marks)** | | **100%** |

### List of Students/ Team Members

**1.** ………………………………………………………

**2.** ………………………………………………………

**3.** ………………………………………………………

**4.** ………………………………………………………

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| --- | --- | --- | --- |
| **Marks obtained** | | | **Dated signature of**  **Teacher** |
| **Process**  **Related(35)** | **Product**  **Related(15)** | **Total(50)** |  |
|  |  |  |

## Practical No: 10

**Design a web page using following form controls:**

## a.Text box, b. Radio button, c. Check box, d. Buttons

**I Practical Significance:**

In this practical we will learn how to design a web page using different controls.

## Relevant Program Outcomes (POs)

* **Basic Knowledge:** Apply knowledge of basic mathematics, sciences and basic engineering to solve the computer group related problem.
* **Discipline Knowledge:** Apply computer programming knowledge to solve the computer group related problems.
* **Experiments and practices:** Plan to perform experiments and practices to use the result to solve the computer group related problems.
* **Engineering tools:** Apply relevant Computer programming technologies and tools with an understanding of the limitations.
* **Individual and Teamwork:** Function effectively as a leader and the team member in diverse/multidisciplinary teams.
* **Communication:** Communicate effectively in oral and written form.

## Competency and Practical skills: “Design a web page”

This practical is expected to learn following skill-

Design a web page using a.Text box, b. Radio button, c. Check box, d. Buttons

**Relevant Course Outcome(s):**

CO4 Use form controls with validation to collect user’s input.

## Practical Outcome (PrOs) :

Write a program to design a web page using a.Text box, b. Radio button, c. Check box,

1. Buttons

## Relevant Affective domain related Outcome(s)

* 1. Work collaboratively in team.
  2. Follow ethical practices

## Minimum Theoretical Background:

1. **Textbox:**

A text input field allows a user to enter a single line of text.

**Example**: For welcome.html file and it has a text field and submit button.

<html>

<body>

<form action=”welcome.php” method=”get”>

<input type=”text” name=”user”/>

<input type=”submit” value=”Submit” />

</form>

</body>

</html>

## Radio button:

Radio buttons let a user select only one of a limited number of choices: Example:

<input type="radio" id="male" name="gender" value="male">

<label for="male">Male</label><br>

<input type="radio" id="female" name="gender" value="female">

<label for="female">Female</label><br>

<input type="radio" id="other" name="gender" value="other">

<label for="other">Other</label>

## Check box:

<input type="checkbox" id="vehicle1" name="vehicle1" value="Bike">

<label for="vehicle1"> I have a bike</label><br>

<input type="checkbox" id="vehicle2" name="vehicle2" value="Car">

<label for="vehicle2"> I have a car</label><br>

<input type="checkbox" id="vehicle3" name="vehicle3" value="Boat">

<label for="vehicle3"> I have a boat</label><br>

## Buttons :

<!DOCTYPE html>

<html>

<title>W3.CSS</title>

<meta name="viewport" content="width=device-width, initial-scale=1">

<link rel="stylesheet" href="https:/[/www](http://www.w3schools.com/w3css/4/w3.css).[w3schools.com/w3css/4/w3.css](http://www.w3schools.com/w3css/4/w3.css)">

<body>

<div class="w3-container">

<h2>Buttons (w3-button)</h2>

<input type="button" class="w3-button w3-black" value="Input Button">

<button class="w3-button w3-black">Button Button</button>

<a href="#" class="w3-button w3-black">Link Button</a>

</div>

</body>

</html>

## VII. Resources Required

1. **Resources used:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. no.** | **Name of Resources** | **Suggested Broad Specification** | **Quantity** | **Remark** |
| 1 | Computer System with board specifications |  |  |  |
| 2 | Software |  |  |  |
| 3 | Any other resource  used |  |  |  |

## Program Code: Teacher must assign a separate program statement to group of 3-4 students.

* 1. **Write a program to design a registration form using textbox, radio button, checkbox and button.**

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## Result ( Output of code )

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## Practical Related Questions:

### Note: Below given are few sample questions for reference. Teacher must design more such questions so as to ensure the achievement of identified CO.

* 1. Write a use and syntax of following controls:
     1. Textbox b. Radio button

c. Check box d. Buttons

(Space for Answer)

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## Exercise

* 1. **Develop web page and do validation using control text box, radio button, check box and button.**

(Space for Answer)

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## References/ Suggestions for Futher Reading.

1. https://[www.w3schools.com/php/default.asp](http://www.w3schools.com/php/default.asp)
2. https:/[/www.guru99.com/what-is-php-program.html](http://www.guru99.com/what-is-php-program.html)
3. https://[www.tutorialspoint.com/php/](http://www.tutorialspoint.com/php/)
4. https://tutorialehtml.com/en/php-tutorial- introduction/
5. [www.tizag.com/phpT/](http://www.tizag.com/phpT/)
6. https://books.goalkicker.com/PHPBook/
7. https://codecourse.com/watch/php-basics

## Assessment Scheme

|  |  |  |
| --- | --- | --- |
| **Performance Indicators** | | **Weightage** |
| **Process related ( 35 marks)** | | **70%** |
| **1** | **Logical formation** | **30%** |
| **2** | **Debugging ability** | **30%** |
| **3** | **Follow ethical practices** | **10%** |
| **Product related (15 marks)** | | **30%** |
| **4** | **Expected output** | **10%** |
| **5** | **Timely submission of report** | **10%** |
| **6** | **Answer to sample questions** | **10%** |
| **Total ( 50 Marks)** | | **100%** |

### List of Students/ Team Members

**1.** ………………………………………………………

**2.** ………………………………………………………

**3.** ………………………………………………………

**4.** ………………………………………………………

|  |  |  |  |
| --- | --- | --- | --- |
| **Marks obtained** | | | **Dated signature of**  **Teacher** |
| **Process**  **Related(35)** | **Product**  **Related(15)** | **Total(50)** |  |
|  |  |  |

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## Practical No: 11

**Design a web page using following form controls:**

## List box, b. Combo box, c. Hidden field box

1. **Practical Significance:**

In this practical we will learn how to design a web page using different controls.

## Relevant Program Outcomes (POs)

* + **Basic Knowledge:** Apply knowledge of basic mathematics, sciences and basic engineering to solve the computer group related problem.
  + **Discipline Knowledge:** Apply computer programming knowledge to solve the computer group related problems.
  + **Experiments and practices:** Plan to perform experiments and practices to use the result to solve the computer group related problems.
  + **Engineering tools:** Apply relevant Computer programming technologies and tools with an understanding of the limitations.
  + **Individual and Teamwork:** Function effectively as a leader and the team member in diverse/multidisciplinary teams.
  + **Communication:** Communicate effectively in oral and written form.

## Competency and Practical skills: “Design a web page”

This practical is expected to learn following skill-

Design a web page using a.List box, b. Combo box, c. Hidden field box

**Relevant Course Outcome(s):**

CO4. Use form controls with validation to collect user’s input.

## Practical Outcome (PrOs) :

Write a program to design a web page using a.List box, b. Combo box, c. Hidden field box

## Relevant Affective domain related Outcome(s)

1. Work collaboratively in team.
2. Follow ethical practices

## Minimum Theoretical Background:

1. **List box:**

A text input field allows a user to enter a single line of text.

**Example**: For welcome.html file and it has a text field and submit button.

<html>

<head>

<title>List Box</title>

</head>

<body>

<form action="" method="post">

<select name="foods[]" size="3">

<option value="Tomatoes">Tomatoes</option>

<option value="Cucumbers">Cucumbers</option>

<option value="Celery">Celery</option>

</select><br>

<input type="submit" name="submit" value="Submit"/>

</form>

<?php

$c= $\_POST['foods']; if(isset($c))

{

echo 'You have chosen '; foreach($c as $key => $value)

{

echo $value;

}

}

else

{

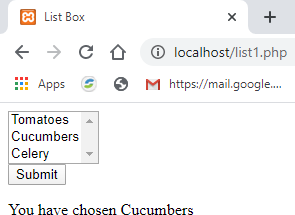
echo "You haven't selected any foods";

}

?>

</body>

</html>



1. **Combo box:**

Radio buttons let a user select only one of a limited number of choices: Example:

<html>

<head>

<title>Combo Box</title>

</head>

<body>

<form action="" method="post">

<select name="foods[]">

<option value="Mango">Mango</option>

<option value="Banana">Banana</option>

<option value="Watermelon">Watermelon</option>

<option value="Grapes">Grapes</option>

</select><br>

<input type="submit" name="submit" value="Submit"/>

</form>

<?php

$c= $\_POST['foods']; if(isset($c))

{

echo 'You have chosen '; foreach($c as $key => $value)

{

echo $value;

}

}

else

{

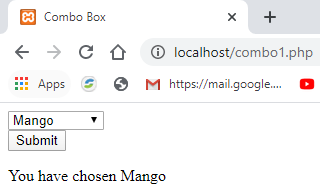
echo "You haven't selected any fruit";

}

?>

</body>

</html>



1. **Hidden field box:**

A hidden field is not displayed on the page. It simply stores the text value specified in the value attribute. Hidden fields are great for passing additional information from the form to the server.

Syntax:

<input type=**"hidden"** name=**"hiddenField"** id=**"hiddenField"** value=**""** />

<html>

<head>

<title>List Box</title>

</head>

<body>

<form action="" method="post">

<select name="foods[]" size="3">

<option value="Tomatoes">Tomatoes</option>

<option value="Cucumbers">Cucumbers</option>

<option value="Celery">Celery</option>

</select><br>

<input type="submit" name="submit" value="Submit"/>

</form>

<?php

$c= $\_POST['foods']; if(isset($c))

{

echo 'You have chosen '; foreach($c as $key => $value)

{

echo $value;

}

}

else

{

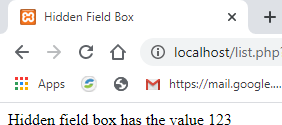
echo "You haven't selected any foods";

}

?>

</body>

</html>



## Resources Required

1. **Resources used:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. no.** | **Name of Resources** | **Suggested Broad Specification** | **Quantity** | **Remark** |
| 1 | Computer System with board specifications |  |  |  |
| 2 | Software |  |  |  |
| 3 | Any other resource used |  |  |  |

## Program Code: Teacher must assign a separate program statement to group of 3-4 students.

**1. Write a program to design a form using list box, combo box and Hidden field box.**

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## Result ( Output of code )

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## Practical Related Questions:

### Note: Below given are few sample questions for reference. Teacher must design more such questions so as to ensure the achievement of identified CO.

* 1. Write a use and syntax of following controls:
  2. List box b. Hidden field box
  3. Combo box

( Space for Answer)

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## Exercise

* 1. **Write a program to design a form using list box, combo box.**

( Space for Answer)

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## References/ Suggestions for Futher Reading.

* 1. https://[www.w3schools.com/php/default.asp](http://www.w3schools.com/php/default.asp)
  2. https:/[/www.guru99.com/what-is-php-program.html](http://www.guru99.com/what-is-php-program.html)
  3. https://[www.tutorialspoint.com/php/](http://www.tutorialspoint.com/php/)
  4. https://tutorialehtml.com/en/php-tutorial- introduction/
  5. [www.tizag.com/phpT/](http://www.tizag.com/phpT/)
  6. https://books.goalkicker.com/PHPBook/
  7. https://codecourse.com/watch/php-basics

## Assessment Scheme

|  |  |  |
| --- | --- | --- |
| **Performance Indicators** | | **Weightage** |
| **Process related ( 35 marks)** | | **70%** |
| **1** | **Logical formation** | **30%** |
| **2** | **Debugging ability** | **30%** |
| **3** | **Follow ethical practices** | **10%** |
| **Product related (15 marks)** | | **30%** |
| **4** | **Expected output** | **10%** |
| **5** | **Timely submission of report** | **10%** |
| **6** | **Answer to sample questions** | **10%** |
| **Total ( 50 Marks)** | | **100%** |

### List of Students/ Team Members

**1.** ………………………………………………………

**2.** ………………………………………………………

**3.** ………………………………………………………

**4.** ………………………………………………………

|  |  |  |  |
| --- | --- | --- | --- |
| **Marks obtained** | | | **Dated signature of**  **Teacher** |
| **Process**  **Related(35)** | **Product**  **Related(15)** | **Total(50)** |  |
|  |  |  |

## Practical No: 12

Develop web page with data validation.

## I Practical Significance:

Form validation is required to prevent web form abuse by malicious users. Improper validation of form data is one of the main causes of security vulnerabilities. PHP provides some inbuilt function using these functions that input data can be validated.

## II Relevant Program Outcomes (POs)

* **Basic Knowledge:** Apply knowledge of basic mathematics, sciences and basic engineering to solve the computer group related problem.
* **Discipline Knowledge:** Apply computer programming knowledge to solve the computer group related problems.
* **Experiments and practices:** Plan to perform experiments and practices to use the result to solve the computer group related problems.
* **Engineering tools:** Apply relevant Computer programming technologies and tools with an understanding of the limitations.
* **Individual and Teamwork:** Function effectively as a leader and the team member in diverse/multidisciplinary teams.
* **Communication:** Communicate effectively in oral and written form.

## Competency and Practical skills:

**“Develop application using PHP”**

* + Develop web page with data validation

## Relevant Course Outcome(s):

CO4: Use form controls with validation to collect user’s input.

## Practical Outcome (PrOs) :

* + Develop web page with data validation.

.

## Relevant Affective domain related Outcome(s)

1. Follow safety practices.
2. Practice good housekeeping
3. Demonstrate working as a leader/ a team member.
4. Follow ethical practices.

## Minimum Theoretical Background:

* + Form validation is required to prevent web form abuse by malicious users. Improper validation of form data is one of the main causes of security vulnerabilities. It exposes your website to attacks such as header injections, cross-site scripting, and SQL injections.
  + header injection attacks can be used to send email spam from your web server
  + cross-site scripting may allow an attacker to post any data to your site
  + SQL injection may corrupt your database backend

PHP provides some inbuilt function, using these functions that input data can be validated.

* + **empty()** function will ensure that text field is not blank it is with some data, function accepts a variable as an argument and returns. It TRUE when the text field have filled with some data otherwise it return FALSE.
  + **is\_numeric()** function will ensure that data entered in a text field is a numeric value, the function accepts a variable as an argument and returns TRUE when the text field is submitted with numeric value otherwise it return FALSE.
  + **preg\_match()** function is specifically used to performed validation for entering text in the text field, function accepts a “regular expression” argument and a variable as an argument which has to be in specific pattern. Typically it is for validating email, IP address and Pin code information in a form.

**Example:**

A php page fromvalidation.php is having three text field name, mobile number and email from user, on clicking submit button a data will be submitted to PHP script validate.php on the server, which will perform three different validation on these three text fields, it will check that name should not be blank, mobile number should be in numeric form and the email is validated with an email pattern.

**Formvalidation.php**

<html>

<body>

<form method="post" action="validdata.php">

<center>

<br><br>Enter Name <input type="text" name="sname">

<br><br>Mobile Number <input type="text" name="mobileno" maxlength=10>

<br><br>Email id <input type="text" name="email">

<br><br><input type="submit" name="submit" value="Submit">

</center>

</form>

</body>

</html>

**validate.php**

<?php

$msg=0; if($\_SERVER['REQUEST\_METHOD']=="POST")

{

if(empty($\_POST['sname'] ))

{

echo "<br>Name can't be blank";

$msg=1;

}

if(!is\_numeric($\_POST['mobileno']))

{

echo "<br>Enter valid Mobile Number";

$msg=1;

}

$pattern= '/\b[\w.-]+@[\w.-]+\.[A-Z a-z]{2,6}\b/';

if(!preg\_match($pattern,$\_POST['email']))

{

echo "<br>Enter valid Email id";

$msg=1;

}

if($msg==0)

{

echo "Data has been recorded successfully";

}

}

?>

## VII. Resources Required

1. **Resources used:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. no.** | **Name of Resources** | **Suggested Broad Specification** | **Quantity** | **Remark** |
| 1 | Computer System with board specifications |  |  |  |
| 2 | Software |  |  |  |
| 3 | Any other resource  used |  |  |  |

## Program Code: Teacher must assign a separate program statement to group of 3-4 students.

* + Write a simple PHP program to check that emails are valid.

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## Practical Related Questions:

### Note: Below given are few sample questions for reference. Teacher must design more such questions so as to ensure the achievement of identified CO.

Enlist and explain different method provided by php for web page validation.

( Space for Answer)

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## References/ Suggestions for Futher Reading.

1. https:/[/www](http://www.w3schools.com/php/default.asp).[w3schools.com/php/default.asp](http://www.w3schools.com/php/default.asp)
2. https:/[/www](http://www.guru99.com/what-is-php-program.html).[guru99.com/what-is-php-program.html](http://www.guru99.com/what-is-php-program.html)
3. https:/[/www](http://www.tutorialspoint.com/php/).[tutorialspoint.com/php/](http://www.tutorialspoint.com/php/)
4. https://tutorialehtml.com/en/php-tutorial-introduction/
5. [www.tizag.com/phpT/](http://www.tizag.com/phpT/)
6. https://books.goalkicker.com/PHPBook/
7. https://codecourse.com/watch/php-basics

## XIV Assessment Scheme

|  |  |  |
| --- | --- | --- |
| **Performance Indicators** | | **Weightage** |
| **Process related ( 35 marks)** | | **70%** |
| **1** | **Logical formation** | **30%** |
| **2** | **Debugging ability** | **30%** |
| **3** | **Follow ethical practices** | **10%** |
| **Product related (15 marks)** | | **30%** |
| **4** | **Expected output** | **10%** |
| **5** | **Timely submission of report** | **10%** |
| **6** | **Answer to sample questions** | **10%** |
| **Total ( 50 Marks)** | | **100%** |

### List of Students/ Team Members

**1.** ………………………………………………………

**2.** ………………………………………………………

**3.** ………………………………………………………

**4.** ………………………………………………………

|  |  |  |  |
| --- | --- | --- | --- |
| **Marks obtained** | | | **Dated signature of**  **Teacher** |
| **Process**  **Related(35)** | **Product**  **Related(15)** | **Total(50)** |  |
|  |  |  |

## Practical No: 13

**Write simple PHP program to -**

## Set cookies and read it.

1. **Demonstrate session management**

## I Practical Significance:

In this practical we will learn how to create cookie, modify it and delete it.Also we will learn how to start a session, get session variables and destroy a session.

## Relevant Program Outcomes (POs)

* **Basic Knowledge:** Apply knowledge of basic mathematics, sciences and basic engineering to solve the computer group related problem.
* **Discipline Knowledge:** Apply computer programming knowledge to slove the computer group related problems.
* **Experiments and practices:** Plan to perform experiments and practices to use the result to solve the computer group related problems.
* **Engineering tools:** Apply relevant Computer programming technologies and tools with an understanding of the limitations.
* **Individual and Teamwork:** Function effectively as a leader and the team member in diverse/multidisciplinary teams.
* **Communication:** Communicate effectively in oral and written form.

## Competency and Practical skills: a .“Set cookies and read it”

This practical is expected to develop the following skills.

* 1. Write a program to create cookies
  2. Develop a program to modify cookies value
  3. Write a program to delete cookies.

## b.“Demonstrate session management”

This practical is expected to develop the following skills.

1. Write a program to start a session
2. Develop a program get session variables
3. Write a program to destroy a session

## Relevant Course Outcome(s):

CO4 Use form controls with validation to collect user’s input.

## Practical Outcome (PrOs) :

* Write a program to create cookies.
* Develop a program to modify cookies value
* Write a program to delete cookies.
* Write a program to start a session
* Develop a program get session variables
* Write a program to destroy a session

## Relevant Affective domain related Outcome(s)

* 1. Work collaboratively in team.
  2. Follow ethical practices

## Minimum Theoretical Background:

A cookie is a small file with the maximum size of 4KB that the web server stores on the client computer. They are typically used to keeping track of information such as a username that the site can retrieve to personalize the page when the user visits the website next time.

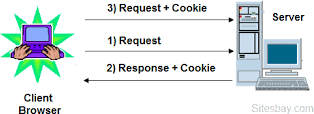


Fig. PHP Cookie

## Create Cookies With PHP

A cookie is created with the setcookie() function. Syntax:

setcookie(name, value, expire, path, domain, secure);

Only the *name* parameter is required. All other parameters are optional.

**Program for creating cookie**

<?php

$cookie\_name = "Teacher";

$cookie\_value = "Kimaya";

setcookie($cookie\_name, $cookie\_value, time() + (86400 \* 30), "/"); // 86400 = 1 day

?>

<html>

<body>

<?php

if (!isset($\_COOKIE[$cookie\_name]))

{

echo "Cookie named '" **.** $cookie\_name **.** "' is not set!";

}

Else

{

echo "Cookie '" **.** $cookie\_name . "' is set! <br>"; echo "Value is: " . $\_COOKIE[$cookie\_name];

}

?>

</body>

</html>

## Output:

Cookie ' Teacher ' is set!

Value is: Kimaya

## Session in PHP

A session is a way to store information (in variables) to be used across multiple pages. Unlike a cookie, the information is not stored on the users computer.

## What is a PHP Session?

When you work with an application, you open it, do some changes, and then you close it. This is much like a Session. The computer knows who you are. It knows when you start

the application and when you end. But on the internet there is one problem: the web server does not know who you are or what you do, because the HTTP address doesn't maintain state. Session variables solve this problem by storing user information to be used across multiple pages (e.g. username, favorite color, etc). By default, session variables last until the user closes the browser. So,Session variables hold information about one single user, and are available to all pages in one application.

## Start a PHP Session

A session is started with the session\_start () function.

Session variables are set with the PHP global variable: $\_SESSION.

Now, let's create a new page called "demo\_session1.php". In this page, we start a new PHP session and set some session variables:

**Program to Start the session**

<?php

// Start the session session\_start();

?>

<!DOCTYPE html>

<html>

<body>

<?php

// Set session variables

$\_SESSION["favcolor"] = "green";

$\_SESSION["favanimal"] = "cat"; echo "Session variables are set.";

?>

</body>

</html>

**Output:**

Session variables are set.

## VII. Resources Required

1. **Resources used:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **no.** | **Name of Resources** | **Suggested Broad Specification** | **Quantity** | **Remark** |
| **1.** | Computer System with board  specifications |  |  |  |
| **2** | Software |  |  |  |
| **3** | Any other resource Used |  |  |  |

## Program Code: Teacher must assign a separate program statement to group of 3-4 students.

**1.Write a program to create, modify and delete a cookie.**

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## Result ( Output of code )

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## Practical Related Questions:

### Note: Below given are few sample questions for reference. Teacher must design more such questions so as to ensure the achievement of identified CO.

* 1. Define cookie.
  2. Define session.
  3. Write difference between cookie and session **.**

( Space for Answer)

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## Exercise

**Write a program to start and destroy a session.**

( Space for Answer)

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## References/ Suggestions for Futher Reading.

* 1. https://[www.w3schools.com/php/default.asp](http://www.w3schools.com/php/default.asp)
  2. https:/[/www.guru99.com/what-is-php-program.html](http://www.guru99.com/what-is-php-program.html)
  3. https://[www.tutorialspoint.com/php/](http://www.tutorialspoint.com/php/)
  4. https://tutorialehtml.com/en/php-tutorial- introduction/
  5. [www.tizag.com/phpT/](http://www.tizag.com/phpT/)
  6. https://books.goalkicker.com/PHPBook/
  7. https://codecourse.com/watch/php-basics

## Assessment Scheme

|  |  |  |
| --- | --- | --- |
| **Performance Indicators** | | **Weightage** |
| **Process related ( 35 marks)** | | **70%** |
| **1** | **Logical formation** | **30%** |
| **2** | **Debugging ability** | **30%** |
| **3** | **Follow ethical practices** | **10%** |
| **Product related (15 marks)** | | **30%** |
| **4** | **Expected output** | **10%** |
| **5** | **Timely submission of report** | **10%** |
| **6** | **Answer to sample questions** | **10%** |
| **Total ( 50 Marks)** | | **100%** |

### List of Students/ Team Members

**1.** ………………………………………………………

**2.** ………………………………………………………

**3.** ………………………………………………………

**4.** ………………………………………………………

|  |  |  |  |
| --- | --- | --- | --- |
| **Marks obtained** | | | **Dated signature of**  **Teacher** |
| **Process**  **Related(35)** | **Product**  **Related(15)** | **Total(50)** |  |
|  |  |  |

## Practical No: 14

**Write a PHP program for sending and receiving plain text message (e-mail).**

## I Practical Significance:

Students will be able to send and receive e-mail using PHP.

## Relevant Program Outcomes (POs)

* + **Basic Knowledge:** Apply knowledge of basic mathematics, sciences and basic engineering to solve the computer group related problem.
  + **Discipline Knowledge:** Apply computer programming knowledge to slove the computer group related problems.
  + **Experiments and practices:** Plan to perform experiments and practices to use the result to solve the computer group related problems.
  + **Engineering tools:** Apply relevant Computer programming technologies and tools with an understanding of the limitations.
  + **Individual and Teamwork:** Function effectively as a leader and the team member in diverse/multidisciplinary teams.
  + **Communication:** Communicate effectively in oral and written form.

## Competency and Practical skills:

**“Develop application to send and receive e-mail using PHP”**

This practical is expected to develop the following skills.

1. Develop a program to send e-mail.
2. Develop a program to receive e-mail.

## Relevant Course Outcome(s):

CO4 Use form controls with validation to collect user’s input.

## Practical Outcome (PrOs) :

1. Develop a program to send e-mail.
2. Develop a program to receive e-mail.

## Relevant Affective domain related Outcome(s)

1. Work collaboratively in team.
2. Follow ethical practices.

## Minimum Theoretical Background:

**PHP *mail:***

PHP *mail()* is an inbuilt PHP function which is used to send emails from PHP scripts. Syntax:

mail (to,subject,message,headers,parameters)

This *mail()* function accepts five parameters as follows and (the last two are optional).

|  |  |
| --- | --- |
| Parameters | Details |
| To | The recipient's email address. |
| subject | The email's subject line. |
| message | The actual email body where you can insert main messages. |
| headers | Additional parameters such as "From", "Cc", "Bcc" etc. |
| parameters | Optional parameters. |

**Simple program to use mail function :**

<html>

<head>

<title> Email using PHP</title>

</head>

<body>

<?php

$to=”[xyz@example.com](mailto:xyz@example.com)”;

$subject=”Test mail”;

$message=”This is HTML message”;

$header=”From: [abc@gmail.com](mailto:abc@gmail.com)”;

$header .= “[Cc:pqr@xyzdomain.com](mailto:pqr@xyzdomain.com)”;

$retvalue=mail($to,$subject,$message,$header); If($retvalue == true)

{

Echo “ Message sent successfully”;

}

Else

{

Echo “ Message could not be sent”;

}

?>

</body>

</html>

## VII. Resources Required

1. **Resources used:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **no.** | **Name of Resources** | **Suggested Broad Specification** | **Quantity** | **Remark** |
| 1 | Computer System with board specifications |  |  |  |
| 2 | Software |  |  |  |
| 3 | Any other resource used |  |  |  |

## Program Code: Teacher must assign a separate program statement to group of 3-4 students.

**Write a program to send and receive mail using PHP.**

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## Result ( Output of code )

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## Practical Related Questions:

### Note: Below given are few sample questions for reference. Teacher must design more such questions so as to ensure the achievement of identified CO.

* 1. Explain the use of mail() function in PHP.
  2. Write a simple program to check that emails are valid.

(Space for Answer)

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## Exercise

* 1. Describe mail function parameter in detail.

(Space for Answer)

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## References/ Suggestions for Futher Reading.

* 1. https://[www.w3schools.com/php/default.asp](http://www.w3schools.com/php/default.asp)
  2. https:/[/www.guru99.com/what-is-php-program.html](http://www.guru99.com/what-is-php-program.html)
  3. https://[www.tutorialspoint.com/php/](http://www.tutorialspoint.com/php/)
  4. https://tutorialehtml.com/en/php-tutorial- introduction/
  5. [www.tizag.com/phpT/](http://www.tizag.com/phpT/)
  6. https://books.goalkicker.com/PHPBook/
  7. https://codecourse.com/watch/php-basics

## Assessment Scheme

|  |  |  |
| --- | --- | --- |
| **Performance Indicators** | | **Weightage** |
| **Process related ( 35 marks)** | | **70%** |
| **1** | **Logical formation** | **30%** |
| **2** | **Debugging ability** | **30%** |
| **3** | **Follow ethical practices** | **10%** |
| **Product related (15 marks)** | | **30%** |
| **4** | **Expected output** | **10%** |
| **5** | **Timely submission of report** | **10%** |
| **6** | **Answer to sample questions** | **10%** |
| **Total ( 50 Marks)** | | **100%** |

### List of Students/ Team Members

**1.** ………………………………………………………

**2.** ………………………………………………………

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|  |  |  |  |
| --- | --- | --- | --- |
| **Marks obtained** | | | **Dated signature of**  **Teacher** |
| **Process**  **Related(35)** | **Product**  **Related(15)** | **Total(50)** |  |
|  |  |  |

## Practical No: 15

**Develop a simple application to -**

## Enter data into database

1. **Retrieve and present data from database**

## I Practical Significance:

In PHP using MYSQL data can be enter into database . Also we can retrieve and present data from database.

## Relevant Program Outcomes (POs)

* + **Basic Knowledge:** Apply knowledge of basic mathematics, sciences and basic engineering to solve the computer group related problem.
  + **Discipline Knowledge:** Apply computer programming knowledge to slove the computer group related problems.
  + **Experiments and practices:** Plan to perform experiments and practices to use the result to solve the computer group related problems.
  + **Engineering tools:** Apply relevant Computer programming technologies and tools with an understanding of the limitations.
  + **Individual and Teamwork:** Function effectively as a leader and the team member in diverse/multidisciplinary teams.
  + **Communication:** Communicate effectively in oral and written form.

## Competency and Practical skills: “Develop application using PHP”

Write a PHP program to -

1. Enter data into database
2. Retrieve and present data from database

## Relevant Course Outcome(s):

CO5 : Perform database operations in PHP.

## Practical Outcome (PrOs) :

1. Develop a program to enter data into database
2. Develop a program to retrieve and present data from database

## Relevant Affective domain related Outcome(s)

1. Follow safety practices.
2. Practice good housekeeping
3. Demonstrate working as a leader/ a teammember.
4. Follow ethical practices.

## Minimum Theoretical Background:

* **Insert Data Into MySQL Using MySQLi**

After a database and a table have been created, we can start adding data in them.

## Here are some syntax rules to follow:

* + The SQL query must be quoted in PHP
  + String values inside the SQL query must be quoted
  + Numeric values must not be quoted
  + The word NULL must not be quoted
  + The INSERT INTO statement is used to add new records to a MySQL table:

## Syntax:

INSERT INTO table\_name (column1, column2, column3,...) VALUES (value1, value2, value3,...)

**The following examples add a new record to the "MyGuests" table:**

**Example (MySQLi Object-oriented)**

<?php

$servername = "localhost";

$username = "username";

$password = "password";

$dbname = "myDB";

// Create connection

$conn = new mysqli\_connect($servername, $username, $password, $dbname);

// Check connection if (!$conn)

{

die ("Connection failed: “. $conn->connect\_error);

}

Echo “Connected successfully”;

$sql = "INSERT INTO MyGuests (firstname, lastname, email) VALUES ('Kimaya', 'Gaikwad', 'kimaya123@example.com')";

if (mysqli\_query($conn,$sql))

{

echo "New record inserted successfully";

} else {

echo "could not insert record: " . mysqli\_error ($conn);

}

Mysqli\_close ($conn);

?>

## Retrieve Data From a MySQL Database:

The SELECT statement is used to select data from one or more tables:

SELECT column\_name(s) FROM table\_name

or we can use the \* character to select ALL columns from a table:

SELECT \* FROM table\_name

## Select Data With MySQLi

The following example selects the id, firstname and lastname columns from the MyGuests table and displays it on the page:

<?php

$servername = "localhost";

$username = "username";

$password = "password";

$dbname = "myDB";

// Create connection

$conn = new mysqli\_connect ($servername, $username, $password, $dbname);

// Check connection

if (!$conn)

{

die ("Connection failed: " **.** mysqli\_connect\_error ( ));

}

Echo “Connected successfully <br/> ”;

$sql = "SELECT id, firstname, lastname FROM MyGuests";

$result = mysqli\_query($conn,$sql);

if (mysqli\_num\_rows($result) > 0) {

// output data of each row

while ($row = mysqli\_fetch\_assoc($result))

{

echo "id: " **.** $row["id"] **.** " **.** Name: " . $row["firstname"]. " " . $row["lastname"]. "<br>";

}

} else

{

echo "0 results";

}

Mysqli\_close ($conn);

?>

## VII. Resources Required

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. no.** | **Name of Resources** | **Suggested Broad Specification** | **Quantity** | **Remark** |
| 1 | Hardware: Computer  System | Computer (i3-i5 preferable), RAM minimum 2 GB and onwards | As per batch size | For all Experiments |
| 2 | Operating  System | Windows/ Linux |
| 3 | Software | PHP 7.3.12 or above |

1. **Resources used:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **no.** | **Name of Resources** | **Suggested Broad Specification** | **Quantity** | **Remark** |
| 1 | Computer System with board specifications |  |  |  |
| 2 | Software |  |  |  |
| 3 | Any other resource used |  |  |  |

## Program Code: Teacher must assign a separate program statement to group of 3-4 students.

**Develop a program to retrieve and present data from database.**

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## Result ( Output of code )

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## Practical Related Questions:

### Note: Below given are few sample questions for reference. Teacher must design more such questions so as to ensure the achievement of identified CO.

* 1. What is MYSQL? How it is used in PHP?
  2. How to create database in MYSQL?
  3. Name to functions of PHP to connect MYSQL database.
  4. Explain mysqli\_connect () function.

(Space for Answer)

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## Exercise

**Write a PHP code to insert data into employee table.**

(Space for Answer)

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## References/ Suggestions for Futher Reading.

* 1. https://[www.w3schools.com/php/default.asp](http://www.w3schools.com/php/default.asp)
  2. https:/[/www.guru99.com/what-is-php-program.html](http://www.guru99.com/what-is-php-program.html)
  3. https://[www.tutorialspoint.com/php/](http://www.tutorialspoint.com/php/)
  4. https://tutorialehtml.com/en/php-tutorial- introduction/
  5. [www.tizag.com/phpT/](http://www.tizag.com/phpT/)
  6. https://books.goalkicker.com/PHPBook/
  7. https://codecourse.com/watch/php-basics

## Assessment Scheme

|  |  |  |
| --- | --- | --- |
| **Performance Indicators** | | **Weightage** |
| **Process related ( 35 marks)** | | **70%** |
| **1** | **Logical formation** | **30%** |
| **2** | **Debugging ability** | **30%** |
| **3** | **Follow ethical practices** | **10%** |
| **Product related (15 marks)** | | **30%** |
| **4** | **Expected output** | **10%** |
| **5** | **Timely submission of report** | **10%** |
| **6** | **Answer to sample questions** | **10%** |
| **Total ( 50 Marks)** | | **100%** |

### List of Students/ Team Members

**1.** ………………………………………………………

**2.** ………………………………………………………

**3.** ………………………………………………………

**4.** ………………………………………………………

|  |  |  |  |
| --- | --- | --- | --- |
| **Marks obtained** | | | **Dated signature of**  **Teacher** |
| **Process**  **Related(35)** | **Product**  **Related(15)** | **Total(50)** |  |
|  |  |  |

## Practical No: 16

**Develop a simple application to Update, Delete table data from database. I Practical Significance:**

Data from table can be updated or deleted using MYSQL.

## Relevant Program Outcomes (POs)

* + **Basic Knowledge:** Apply knowledge of basic mathematics, sciences and basic engineering to solve the computer group related problem.
  + **Discipline Knowledge:** Apply computer programming knowledge to slove the computer group related problems.
  + **Experiments and practices:** Plan to perform experiments and practices to use the result to solve the computer group related problems.
  + **Engineering tools:** Apply relevant Computer programming technologies and tools with an understanding of the limitations.
  + **Individual and Teamwork:** Function effectively as a leader and the team member in diverse/multidisciplinary teams.
  + **Communication:** Communicate effectively in oral and written form.

## Competency and Practical skills: “Develop application using PHP”

* + Write a PHP program to Update, Delete table data from database.

## Relevant Course Outcome(s):

CO5: Perform database operations in PHP.

## Practical Outcome (PrOs) :

1. Write a PHP program to-
   * Update table data from database.
   * Delete table data from database.

## Relevant Affective domain related Outcome(s)

1. Follow safety practices.
2. Practice good housekeeping
3. Demonstrate working as a leader/ a teammember.
4. Follow ethical practices.

## Minimum Theoretical Background:

**PHP MySQL Update Query**

The update keyword is basically used to modify or edit the existing records in the database table. It usually need a where clause to find out in which record change is to be done. It is must to specify the where clause otherwise all records of that table got modify.

Syntax:

UPDATE table\_name SET column1=value1,column2=value2... WHERE column = value Previous records in empInfo table are:

|  |  |  |  |
| --- | --- | --- | --- |
| **Emp\_id** | **Name** | **Email** | **Mobile** |
| 1 | devesh | [devesh@gmail.com](mailto:devesh@gmail.com) | 9910099100 |
| 2 | deepak | [deepak@gmail.com](mailto:deepak@gmail.com) | 9210053520 |
| 3 | ravi | [ravi@gmail.com](mailto:ravi@gmail.com) | 9810098100 |

## This example updates some data in the "empInfo" table

<?php

//connect database

$con=mysqli\_connect ("localhost","root","","Employee") ; If(!$con)

{

die(‘error in connection’.mysqli\_error());

}

//select the database mysqli\_select\_db(“mydb”,$con);

//update values of empInfo table

$data="UPDATE empInfo SET name='dev',mobile=9015501256 WHERE email='devesh@gmail.com'"; mysqli\_query ($con,$data);

mysqli\_close($con);

?>

## PHP MySQL: Delete Data

The DELETE statement is used to delete records from a table:

## Syntax:

DELETE FROM table\_name WHERE some\_column = some\_value

## This example deleted one row from "empInfo" table

<?php

//connect database

$con=mysqli\_connect("localhost","root","","Employee")

// Check connection if (!$con)

{

die("Connection failed: " . (mysqli\_error()));

};

// sql to delete a record

$data="delete from empInfo WHERE email='devesh@gmail.com'"; mysqli\_query($con,$data);

mysqli\_close($con);

?>

## After deletion , the "empInfo" table will look like this:

|  |  |  |  |
| --- | --- | --- | --- |
| **Emp\_id** | **Name** | **Email** | **Mobile** |
| 2 | deepak | [deepak@gmail.com](mailto:deepak@gmail.com) | 9210053520 |
| 3 | ravi | [ravi@gmail.com](mailto:ravi@gmail.com) | 9810098100 |

1. **Resources Required**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. no.** | **Name of**  **Resources** | **Suggested Broad Specification** | **Quantity** | **Remark** |
| 1 | Hardware:  Computer System | Computer (i3-i5 preferable), RAM minimum 2 GB and onwards | As per batch size | For all Experiments |
| 2 | Operating  System | Windows/ Linux |
| 3 | Software | PHP 7.3.12 or above |

## Resources used:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **no.** | **Name of Resources** | **Suggested Broad Specification** | **Quantity** | **Remark** |
| 1 | Computer System with board specifications |  |  |  |
| 2 | Software |  |  |  |
| 3 | Any other resource used |  |  |  |

1. **Program Code: Teacher must assign a separate program statement to group of 3-4 students.**
   1. Write a PHP program to Update table data from student database.

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## Result (Output of code)

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## Practical Related Questions:

### Note: Below given are few sample questions for reference. Teacher must design more such questions so as to ensure the achievement of identified CO.

1.Write a syntax for update and delete data in PHP.

(Space for Answer)

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## Exercise

* 1. Write a PHP program to Update table data from student database.

(Space for Answer)

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## References/ Suggestions for Futher Reading.

* 1. https://[www.w3schools.com/php/default.asp](http://www.w3schools.com/php/default.asp)
  2. https:/[/www.guru99.com/what-is-php-program.html](http://www.guru99.com/what-is-php-program.html)
  3. https://[www.tutorialspoint.com/php/](http://www.tutorialspoint.com/php/)
  4. https://tutorialehtml.com/en/php-tutorial- introduction/
  5. [www.tizag.com/phpT/](http://www.tizag.com/phpT/)
  6. https://books.goalkicker.com/PHPBook/
  7. https://codecourse.com/watch/php-basics

## Assessment Scheme

|  |  |  |
| --- | --- | --- |
| **Performance Indicators** | | **Weightage** |
| **Process related ( 35 marks)** | | **70%** |
| **1** | **Logical formation** | **30%** |
| **2** | **Debugging ability** | **30%** |
| **3** | **Follow ethical practices** | **10%** |
| **Product related (15 marks)** | | **30%** |
| **4** | **Expected output** | **10%** |
| **5** | **Timely submission of report** | **10%** |
| **6** | **Answer to sample questions** | **10%** |
| **Total ( 50 Marks)** | | **100%** |

### List of Students/ Team Members

**1.** ………………………………………………………

**2.** ………………………………………………………

**3.** ………………………………………………………

**4.** ………………………………………………………

|  |  |  |  |
| --- | --- | --- | --- |
| **Marks obtained** | | | **Dated signature of**  **Teacher** |
| **Process**  **Related(35)** | **Product**  **Related(15)** | **Total(50)** |  |
|  |  |  |

# Web Based Application Development With PHP (22619)

MAHARASHTRA STATE BOARD OF TECHNICAL EDUCATION

134