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XAI605A Web Technologies Lab Manual

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Ex.No: 1 Formatting Tags, Ordered List and Unordered List

Aim:

To write a html program using formatting formatting tags, ordered list and unordered list.

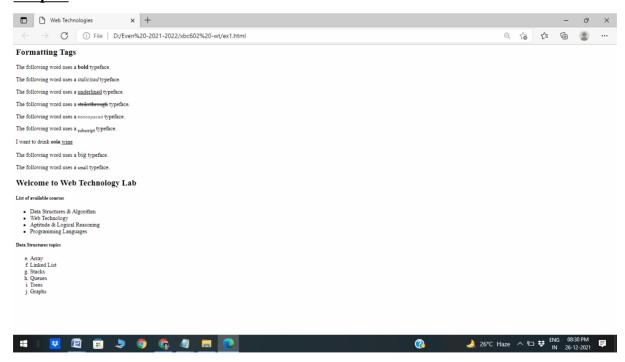
Procedure:

- 1) Create HTML Page named as "ex1.html" and add the following tags details
 - Formatting Tag
 - Different Heading Tag, Paragraph tag
 - Ordered list & unordered list tags
 - Save given page with ex1.html by choosing "All files" from Save as Type in any respective folder
 - Execute the page by double clicking on name of page from respective folder, It will show result on particular browser (eg Mozilla, Chrome, Internet Explorer)

Program:

```
<html>
 <head>
  <title>Web Technologies </title>
</head>
<body>
<h2>Formatting Tags </h2>
The following word uses a <b>bold</b> typeface.
The following word uses a <i>italicized</i> typeface.
The following word uses a <u>underlined</u> typeface.
The following word uses a <strike>strikethrough</strike> typeface.
The following word uses a <tt>monospaced</tt> typeface.
The following word uses a <sub>subscript</sub> typeface.
I want to drink <del>cola</del> <ins>wine</ins>
The following word uses a <big>big</big> typeface.
The following word uses a <small>small</small> typeface.
  <h2>Welcome to Web Technology Lab </h2>
  <h5>List of available courses</h5>
  ul type="square">
```

```
Data Structures & Algorithm
  Web Technology
  Aptitude & Logical Reasoning
  Programming Languages
 <h5>Data Structures topics</h5>
 Array
  Linked List
  Stacks
  Queues
  Trees
  Graphs
 </body>
</html>
```



Result:

Thus to write a html program using formatting formatting tags, ordered list and unordered list has been designed successfully.

Ex: 2 Tables, frame, image map and hyperlink

Aim:

To create a simple webpage using HTML that includes Tables, frame, image map and hyperlink.

ALGORITHM:

1. Write a HTML program in the notepad with the tags such as

A. FRAMES

- <frameset> Defines a set of frames
- <frame> Defines a sub window (a frame)

B. LINKS

A hyperlink is a reference (an address) to a resource on the web.

Example:

Visit W3Schools!

C. TABLES

Tables are defined with the tag. A table is divided into rows (with the tag), and each row is divided into data cells (with the tag). The letters td stands for "table data," which is the content of a data cell.

Tags and their Description:

- <Table> Defines a table
- Defines a table header
- Defines a table row
- Defines a table cell
- 2. Use appropriate tags to apply the background colors and desired styles as Required and save the file with .html extension.
- 3. Run the program in the Web Browser.

PROGRAM:

Home.html

- <html>
- <head>
- <title>Home</title>
- </head>
- <frameset rows="25%,*">

```
<frame src="frame1.html">
<frameset cols="25%,*">
<frame src="frame2.html" name="f2">
<frame src="frame3.html" name="f3">
</frameset>
</html>
frame1.html
<html>
<head><title>frame1</title>
</head>
<body bgcolor="blue">
<h1 style="color.green;font-size:15pt">
<marquee bgcolor="#ccccc" loop="-1" scrollamount="6" width="100%">
PERIYAR MANIAMMAI INSTITUTE OF SCIENCE AND TECHNOLOGY
</marquee>
</h1>
</body>
</html>
frame2.html
<html>
<head><title>frame2</title>
<style type="text/css">
h1
font-size:25pt;color:pink;
www.pmu.edu
www.pmu.edu
</style>
</head>
<body bgcolor="red">
```

```
<h1>click the link</h1>
<a href="intro.html" target=f3>Introduction</a><br>
<a href="dept.html" target=f3>Departments</a><br>
<a href="ad.html" target=f3>ADDRESS</a><br>
<a href="feed.html" target=f3>Feedback</a><br>
<a href="gall.html" target=f3>Gallery</a><br>
</body>
</html</pre>
```

Frame3.html

```
<html>
```

<head><title>1st page</title>

link rel="stylesheet" type="text/css" href="C:\Documents and

Settings\Administrator\Desktop\ab\css1.css"/>

</head>

<body bgcolor="tan">

<h2> <center>YOU ARE IN HOME PAGE</center></h2>

</body>

</html>

Intro.html

<html>

<head><title>intro</title>

</head>

<body bgcolor="black">

>

Welcome to Periyar Maniammai Institute of Science and Technology -

Deemed to be university

www.pmu.edu

www.pmu.edu

"Periyar Maniammai Institute of Science & Technology is proud

to be a unique institution of higher learning and academic excellence, creating new horizons in the arena of technical education and research. Curriculum innovation given priority to make the courses industry and research oriented."

```
research oriented."

</font>
</body>
</html>

ad.html

<html>
<head><title>ADDRESS</title>
</head>
<body bgcolor="black">

<font color=red>
Name:Periyar Maniammi Institute
```

Name:Periyar Maniammi Institute of Science and Technology

Location: Vallam, Thanjavur < br>

Contact No:04362 2646002

Website: www.pmu.edu

</body>

</html>

Dept.html

<html>

<head><title>Departments</title>

</head>

<body>

<div align="center">

>

- Dept name

Dept code

www.pmu.edu

www.pmu.edu

- >
- 01
- CSE

- 02
- ECE
- >
- 03
- <td>EEE
- >
- 04
- IT
- >
- 05
- MECH
- >
- 06
- AERO

- </div>
- </body>

```
</html>
Feed.html
<html>
<head><title>feed</title>
</head>
<body bgcolor="black">
>
<font color=green>
www.pmu.edu
www.pmu.edu
To give your feedback mail to google_feedback@edu.in
</font>
</body>
</html>
Gall.html
<html>
<head><title>gall</title>
</head>
<body bgcolor="pink">
>
<font color=blue>
College Front View</font>
<img src="file:///d:/google.JPG" height="300" width="400"/>
</body>
</html>
```



Thus to create a simple webpage using HTML that includes Tables, frame, image map and hyperlink has been created successfully.

Ex: 3 Font, color and style and background color

Aim:

To create a html program using css to apply Font, color and style and background color.

Procedure:

CSS can be added to HTML documents in 3 ways:

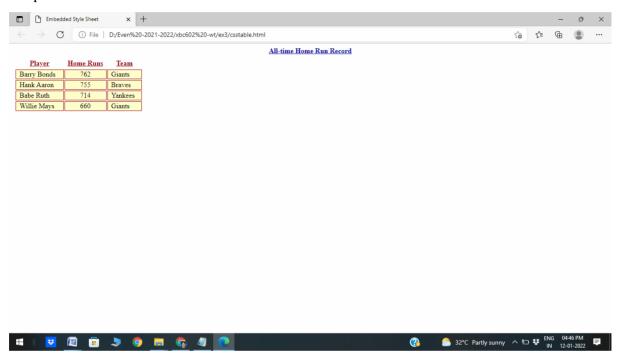
- **Inline** by using the style attribute inside HTML elements
- **Internal** by using a <style> element in the <head> section

• External - by using a <link> element to link to an external CSS file

```
Program:
```

```
1. inline css
      <html>
      <body>
      <h1 style="color:blue;">A Blue Heading</h1>
      A red paragraph.
      </html>
      </body>
   2. internal CSS
<html>
<head>
<style>
body {
 background-color: linen;
h1 {
 color: maroon;
 margin-left: 40px;
</style>
</head>
<body>
<h1>This is a heading</h1>
This is a paragraph.
</body>
</html>
   3. External CSS:
<html>
<link rel="stylesheet" href="mystyle.css">
</head>
<body>
<h1>This is a heading</h1>
This is a paragraph.
</body>
</html>
(mystyle.css)
body {
```

```
background-color: powderblue;
}
h1 {
  color: blue;
}
p {
  color: red;
}
```



Result:

Thus to create a html program using CSS to apply Font, color and style and background color has been verified.

Ex 4:

Form validation

Aim:

To create a program for Form validation using HTML and JavaScript.

Procedure:

- create a java script program using <script> ... </script> tag
- to define a javascript function

```
function javascript_forms()
{
.....
}
```

- Declare the variables using var keyword
- Design your forms using <form> tag and <input> tag.

•

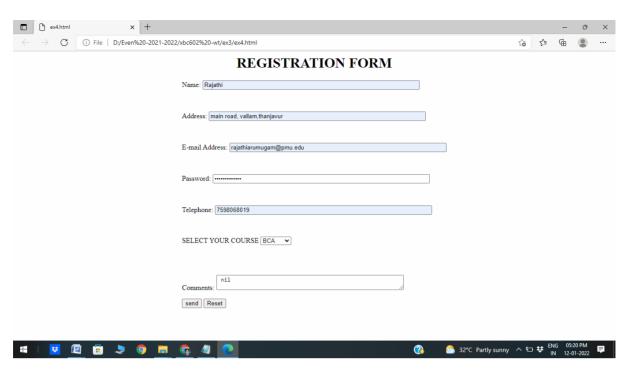
Program Coding:

```
<html>
  <head>
    <script>
       function javascript forms() {
         var name =
           document.forms["RegForm"]["Name"];
         var email =
           document.forms["RegForm"]["EMail"];
         var phone =
           document.forms["RegForm"]["Telephone"];
         var what =
           document.forms["RegForm"]["Subject"];
         var password =
           document.forms["RegForm"]["Password"];
         var address =
           document.forms["RegForm"]["Address"];
         if (name.value == "") {
           window.alert("Please enter your name.");
           name.focus();
           return false;
         }
         if (address.value == "") {
           window.alert("Please enter your address.");
           address.focus();
           return false;
```

```
if (email.value == "") {
       window.alert(
        "Please enter a valid e-mail address.");
       email.focus();
       return false;
     }
    if (phone.value == "") {
       window.alert(
        "Please enter your telephone number.");
       phone.focus();
       return false;
    if (password.value == "") {
       window.alert("Please enter your password");
       password.focus();
       return false;
     }
     if (what.selectedIndex \leq 1) {
       alert("Please enter your course.");
       what.focus();
       return false;
     return true;
</script>
<style>
```

```
div {
       box-sizing: border-box;
       width: 100%;
       border: 100px solid black;
       float: left;
       align-content: center;
       align-items: center;
    form {
       margin: 0 auto;
       width: 600px;
  </style>
</head>
<body>
  <h1 style="text-align: center;">REGISTRATION FORM</h1>
  <form name="RegForm" action="/submit.php"</pre>
     onsubmit="return javascript_forms()" method="post">
    Name: <input type="text"</p>
              size="65" name="Name" />
    <br/>br />
    Address: <input type="text"</p>
               size="65" name="Address" />
   <br/>br />
    E-mail Address: <input type="text"</p>
              size="65" name="EMail" />
    <br/>br />
    Password: <input type="text"</p>
            size="65" name="Password" />
```

```
<br/>br />
      Telephone: <input type="text"</p>
             size="65" name="Telephone" />
      <br/>br />
      >
         SELECT YOUR COURSE
         <select type="text" value="" name="Subject">
           <option>BTECH</option>
           <option>BBA</option>
           <option>BCA</option>
           <option>B.COM</option>
         </select>
      <br />
      <br />
      Comments: <textarea cols="55"
                name="Comment"> </textarea>
      >
         <input type="submit"</pre>
            value="send" name="Submit" />
         <input type="reset"</pre>
            value="Reset" name="Reset" />
      </form>
  </body>
</html>
Output:
```



Thus to create a program for Form validation using HTML and JavaScript has been verified.

Ex 5: Looping and Conditional Statements

Aim:

To create a javascript program using Looping and Conditional Statements.

Procedure:

For loop

How to write a For loop. Use a For loop to run the same block of code a specified number of times

While loop

How to write a While loop. Use a While loop to run the same block of code while or until a condition is true

Do while loop

How to write a Do While loop. Use a Do While loop to run the same block of code while or until a condition is true. This loop will always be executed once, even if the condition is false, because the statements are executed before the condition is tested

For loop

How to write a For loop. Use a For loop to run the same block of code a specified number of times

Program coding:

```
<html>
<body>
<script type="text/javascript">
for (i=0; i<=5; i++)
{
    document.write("<b>The number is " + i + "</b>")
    document.write("<br>")
}
</script>
Explanation:
The for loop sets <b>i</b> equal to 0.
As long as <b>i</b> is less than or equal to 5, the loop will continue to run.
<b>i</b> will increase by 1 each time the loop runs.
</body>
</html>
```

While loop

How to write a While loop. Use a While loop to run the same block of code while or until a condition is true

Program coding:

```
<html>
<body>
<script type="text/javascript">
```

```
i=0 while (i<=5)
{

document.write("<b>The number is " + i + "</b>")

document.write("<br>")

i++
}

</script>

Explanation:

The for loop sets <b>i</b> equal to 0.

As long as <b>i</b> is less than or equal to 5, the loop will continue to run.

<b>i</b> will increase by 1 each time the loop runs.

</body>

</html>
```

Do while loop

How to write a Do While loop. Use a Do While loop to run the same block of code while or until a condition is true. This loop will always be executed once, even if the condition is false, because the statements are executed before the condition is tested

Program coding:

```
<html>
<body>
<script type="text/javascript">
i=0
do
{
document.write("<b>The number is " + i + "</b>")
document.write("<br/>)
i++
}
while (i<=5)
</script>
Explanation:
```

- pThe for loop sets b>i equal to 0.
- As long as i is less than or equal to 5, the loop will continue to run.
- i will increase by 1 each time the loop runs.
- </body>
- </html>

output:



Result:

Thus to create a javascript program using Looping and Conditional Statements has been verified.

Ex: 6 PHP - Strings and Operators

Aim:

To write a php program using operators and string functions.

PHP divides the operators in the following groups:

Arithmetic operators
Assignment operators
Comparison operators
Increment/Decrement operators
Logical operators
String operators
Array operators
Conditional assignment operators

Program coding:

<html>

<body>

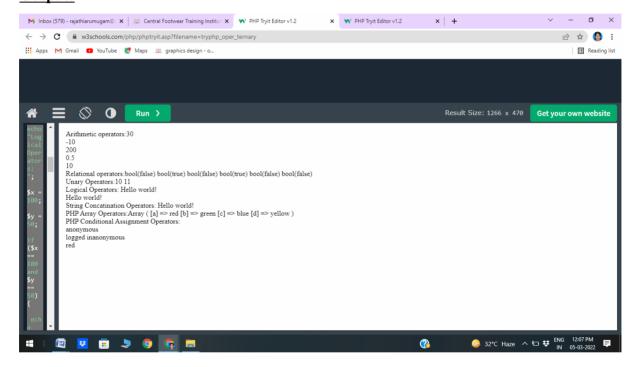
<?php

echo "Arithmetic operators:";

```
$a=10; $b=20;
echo $a+$b."<br>";
echo $a-$b."<br>";
echo $a*$b."<br>";
echo $a/$b."<br>";
echo $a%$b."<br>";
echo "Relational operators:";
$x=50; $y=30;
var_dump ($x<$y);</pre>
var_dump(x>y);
var_dump ($x<=$y);</pre>
var dump (x>=y);
var dump (x==y);
var dump (x===y);
echo "<br>";
echo "Unary Operators:";
x = 10;
echo $x++ ." ";
echo $x;
echo "<br/>';
echo "Logical Operators: ";
x = 100;
y = 50;
if ($x == 100 \text{ and } $y == 50) {
  echo "Hello world!";
```

```
echo "<br>";
x = 100;
y = 50;
if ($x == 100 \text{ or } $y == 80) {
  echo "Hello world!";
echo "<br/>';
echo "String Concatination Operators:\n\n";
txt1 = "Hello";
$txt2 = " world!";
echo $txt1 . $txt2;
echo "<br/>t>":
echo "PHP Array Operators:";
x = array("a" => "red", "b" => "green");
$y = array("c" => "blue", "d" => "yellow");
print r(x + y); // union of x and y
echo "<br>";
echo "PHP Conditional Assignment Operators:";
echo "<br/>'';
 // if empty($user) = TRUE, set $status = "anonymous"
 echo $status = (empty($user)) ? "anonymous" : "logged in";
 echo("<br>");
 $user = "John Doe";
 // if empty($user) = FALSE, set $status = "logged in"
 echo $status = (empty($user)) ? "anonymous" : "logged in";
  // variable $user is the value of $ GET['user']
```

```
// and 'anonymous' if it does not exist
echo $user = $_GET["user"] ?? "anonymous";
echo("<br/>');
// variable $color is "red" if $color does not exist or is null
echo $color = $color ?? "red";
?>
</body>
</html>
```



Result:

Thus to write a php program using operators and string functions has been verified.

Ex: 7 PHP - User Defined Functions

Aim:

To create PHP User Defined Functions.

PHP User Defined Functions

A function is a block of statements that can be used repeatedly in a program.

A function will not execute automatically when a page loads.

A function will be executed by a call to the function.

Create a User Defined Function in PHP

A user-defined function declaration starts with the word function:

Syntax

```
function functionName() {
  code to be executed;
}
Program coding:
```

```
<html>
<body>
</php
echo "Function No arguments:";
function writeMsg() {
   echo "Hello world!";
}
swriteMsg();
echo "<Br>";
echo "Function with arguments:";
function familyName($fname, $year) {
}
```

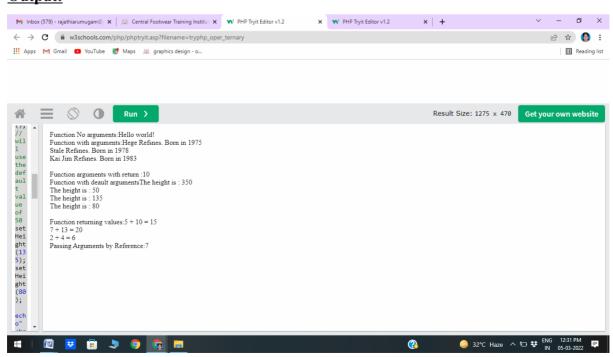
```
echo "$fname Refsnes. Born in $year <br>";
}
familyName("Hege", "1975");
familyName("Stale", "1978");
amilyName("Kai Jim", "1983");
echo "<br/>';
echo "Function arguments with return:";
function addNumbers(int $a, int $b) {
 return a + b;
echo addNumbers(5, "5 days");
echo "<br>";
echo "Function with deault arguments";
function setHeight(int $minheight = 50) {
 echo "The height is: $minheight <br/> ;;
}
setHeight(350);
setHeight(); // will use the default value of 50
setHeight(135);
setHeight(80);
echo"<br>";
echo "Function returning values:";
function sum(int $x, int $y) {
 x = x + y;
 return $z;
```

```
}
echo "5 + 10 = " . sum(5, 10) . "<br>";
echo "7 + 13 = " . sum(7, 13) . "<br>";
echo "2 + 4 = " . sum(2, 4);

echo "Passing Arguments by Reference:";

function add_five(&$value) {
    $value += 5;
}

$num = 2;
add_five($num);
echo $num;
?>
</body>
</html>
```



Thus to create PHP User Defined Functions has been verified.

Ex: 8 PHP – Form Validation

Aim:

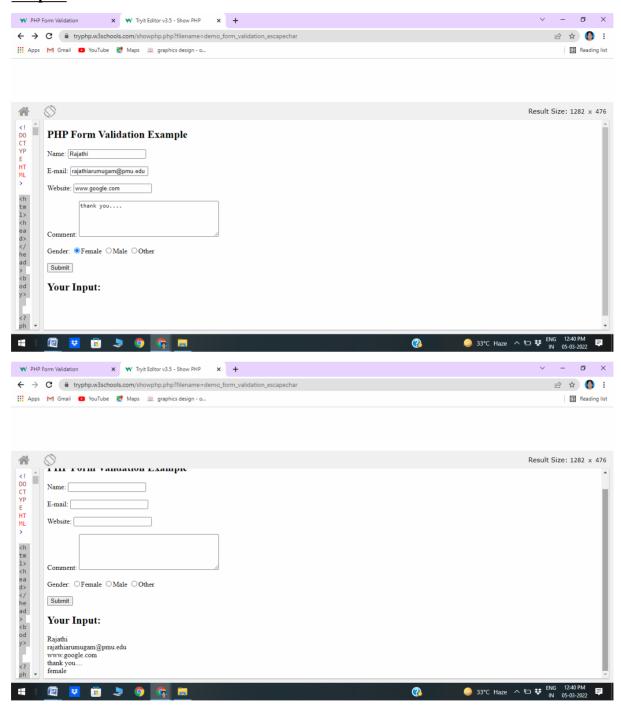
To create a Validate Form Data With PHP.

Program coding:

```
<html>
<head>
</head>
<body>
<?php
// define variables and set to empty values
$name = $email = $gender = $comment = $website = "";
if ($_SERVER["REQUEST_METHOD"] == "POST") {
 $name = test_input($_POST["name"]);
 $email = test_input($_POST["email"]);
 $website = test_input($_POST["website"]);
 $comment = test_input($_POST["comment"]);
 $gender = test_input($_POST["gender"]);
function test input($data) {
 data = trim(data);
 $data = stripslashes($data);
 $data = htmlspecialchars($data);
 return $data;
```

} ?>

Output:



Result:

Thus To create a Validate Form Data With PHP has been verified.

Ex: 9 PHP – File Handling

Aim:

To create a PHP program using PHP readfile() Function.

PHP readfile() Function

The readfile() function reads a file and writes it to the output buffer.

Assume we have a text file called "webdictionary.txt", stored on the server, that looks like this:

AJAX = Asynchronous JavaScript and XML

CSS = Cascading Style Sheets

HTML = Hyper Text Markup Language

PHP = PHP Hypertext Preprocessor

SQL = Structured Query Language

SVG = Scalable Vector Graphics

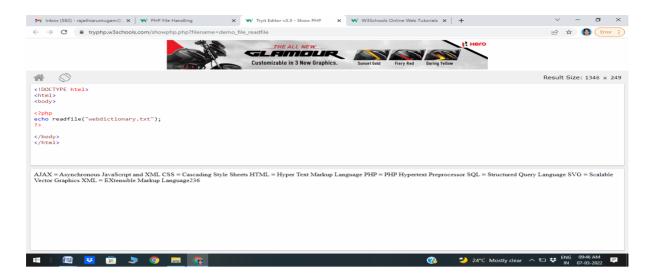
XML = EXtensible Markup Language

Program coding:

File Handling

```
<!DOCTYPE html>
<html>
<body>
<?php
echo readfile("webdictionary.txt");
?>
</body>
</html>
```

Output:



Thus to create a PHP program using PHP readfile() Function has been verified successfully.

Ex: 10 PHP – Exception Handling

Aim:

To create PHP program File Exception Handling.

Throwing an Exception

- The throw statement allows a user defined function or method to throw an exception.
- When an exception is thrown, the code following it will not be executed.
- If an exception is not caught, a fatal error will occur with an "Uncaught Exception" message.

Program Coding:

(i) Throwing an Exception

```
<?php
function inverse($x) {
  if (!$x) {
  throw new Exception('Division by zero.');
  }
  return 1/$x;
}
try {
  echo inverse(5) . "\n";
  echo inverse(0) . "\n";
} catch (Exception $e) {
  echo 'Caught exception: ', $e->getMessage(), "\n";
}
// Continue execution
  echo "Hello World\n";
?>
```

output:

0.2

Caught exception: Division by zero. Hello World

(ii) Exception handling with a finally block

```
<?php
function inverse($x) {
  if (!$x) {
  throw new Exception('Division by zero.');
   }
  return 1/$x;
}
try {
  echo inverse(5) . "\n";
} catch (Exception $e) {
  echo 'Caught exception: ', $e->getMessage(), "\n";
```

```
} finally {
echo "First finally.\n";
try {
echo inverse(0) . "\n";
} catch (Exception $e) {
echo 'Caught exception: ', $e->getMessage(), "\n";
} finally {
echo "Second finally.\n";
// Continue execution
echo "Hello World\n";
?>
Output:
First finally.
Caught exception: Division by zero.
Second finally.
Hello World
(iii) Nested Exception
<?php
classMyException extends Exception { }
class Test {
public function testing() {
try {
try {
throw new MyException('foo!');
       } catch (MyException $e) {
         // rethrow it
throw $e:
     } catch (Exception $e) {
var dump($e->getMessage());
foo = new Test;
$foo->testing();
?>
The above example will output:
string(4) "foo!"
```

Thus to create PHP program File Exception Handling has been verified.

Ex.No.11: Cookies and Sessions

Aim:

To create a PHP program to Create/Retrieve sessions and cookies.

Program:

(i) PHP Create/Retrieve a Cookie

```
<!DOCTYPE html>
<?php
$cookie name = "user";
$cookie value = "John Doe";
setcookie(scookie name, scookie value, time() + (86400 * 30), "/"); // 86400 = 1 day
?>
<html>
<body>
<?php
if(!isset($ COOKIE[$cookie name])) {
echo "Cookie named " . $cookie_name . " is not set!";
echo "Cookie " . $cookie name . " is set! < br>";
echo "Value is: " . $ COOKIE[$cookie_name];
?>
<strong>Note:</strong> You might have to reload the page to see the value of the cookie.
</body>
</html>
```

Output:

Cookie 'user' is set!

Value is: John Doe

Note: You might have to reload the page to see the value of the cookie.

(ii) Modify a Cookie Value

```
</body>
```

Cookie 'user' is set! Value is: Alex Porter

Note: You might have to reload the page to see the new value of the cookie.

(iii) Delete cookies

```
<?php
// set the expiration date to one hour ago
setcookie("user", "", time() - 3600);
?>
<html>
<body>
<?php
echo "Cookie 'user' is deleted.";
?>
</body>
</html>
```

Output:

Cookie 'user' is deleted.

Result:

Thus to create a PHP program to Create/Retrieve sessions and cookies has been verified.

Ex.No.12

PHP with MySQL

Aim:

Program Coding:

```
<html>
<head>
</head>
<body>
<?php
$conn = mysql connect('localhost', 'root', ");
if (!$conn)
die('Could not connect: '. mysql error());
mysql select db("coursedb", $conn);
?>
<center>
<form method="POST">
<strong><h2><font face="Palatino Linotype,Book Antique, Palatino,"</pre>
serif"><b>Curriculum</b></font></h2></strong>
align="left"><font face="Palatino Linotype, Book Antique, Palatino,"
serif">Regulation</font>
<input type="text" name="regulation" >
align="left"><font face="Palatino Linotype, Book Antique, Palatino,"
serif">Revision</font>
<input type="text" name="revision">
<font face="Palatino Linotype, Book Antique, Palatino, serif">Semester
<select name="semester">
       <option value="0">None</option>
       <option value="1">1</option>
        <option value="2">2</option>
        <option value="3">3</option>
        <option value="4">4</option>
        <option value="5">5</option>
       <option value="6">6</option>
        <option value="7">7</option>
        <option value="8">8</option>
        <option value="9">9</option>
        <option value="10">10</option>
       </select></font>
       <font face="Palatino Linotype, Book Antique, Palatino, serif">Course
Code</font>
       <input name="course code" type="text" >
```

```
<font face="Palatino Linotype,Book Antique, Palatino, serif">Course
Name</font>
        <input name="course name" type="text">
<font face="Palatino Linotype, Book Antique, Palatino, serif">Category
        <select name="category">
        <option value="0">None</option>
        <option value="1">Common Course</option>
        <option value="2">Core Course</option>
        <option value="3">Elective Course</option>
        <option value="4">Open Elective Course</option>
        </select></font>
<font face="Palatino Linotype, Book Antique, Palatino, serif">Course
Order</font>
        <input type="text" name="course order" size=5 min="1" max="9" >
<font face="Palatino Linotype,Book Antique, Palatino, serif"><b> Paper
Type</b>
<select name="paper type">
        <option value="0">None</option>
        <option value="1">Theory</option>
        <option value="2">Practical</option>
        <option value="3">Theory Cum Lab
        </select></font>
<font face="Palatino Linotype, Book Antique, Palatino, serif">
        <input type=submit value=SUBMIT name=submit>
        </form>
</center>
</body>
</html>
<?php
if (isset($ POST['submit']))
$conn = mysql connect('localhost', 'root', ");
if (!$conn)
die('Could not connect: '. mysql error());
mysql select db("coursedb", $conn);
$regulation=$ POST['regulation'];
$revision=$_POST['revision'];
$semester=$ POST['semester'];
$coursecode=$ POST['course code'];
$coursename=$ POST['course name'];
$category=$ POST['category'];
$courseorder=$ POST['course order'];
$papertype=$ POST['paper type'];
```

Thus To create a Validate Form Data With PHP has been verified.