DAYANANDA SAGAR COLLEGE OF ENGINEERING
(An Autonomous Institution, Affiliated to VTU)
DEPARTMENT OF MASTER OF COMPUTER APPLICATIONS

Web Technologies-MMC104

Lab Manual

List of Programs:

1. Designing a Time Table using HTML
2. Creating a form to submit student details
3. Creating responsive designs with Bootstrap.
4. Adding interactivity with JavaScript.
5. Using Arrays and Loops in JavaScript
6. Creating and Parsing an XML File with Book Details using JavaScript
7. Creating and Parsing a JSON File with Book Details using JavaScript
8. CRUD operations using PHP
9. Creating an XML file using PHP
10. Reading an XML file and displaying its contents using PHP

Ex .No.: 1   **Designing a Class Timetable Web Page Using HTML**

Problem Statement: Design and develop an **HTML webpage** to display the **Timetable** as below.

DAYANANDA SAGAR COLLEGE OF ENGINEERING

An Autonomous Institute affiliated to Visvesvaraya Technological University (VTU),
Approved by AICTE and UGC, Accredited by NAAC with 'A' grade, NRF (201-300) Ranked Intuition

Name of the Department: Master of Computer Applications

Class Timetable: October 2025 – April 2026

	SEMESTER: I A					ROOM NO: 601/LAB1/LAB2		
DAY	9:00 AM 10:00 AM	10:00 AM 11:00 AM		11:15 AM 12:15 PM	12:15 PM 01:15 PM	02:00 PM 03:00 PM	03:00 PM 04:00 PM	04:00 PM 05:00 PM
MON	CN -601	DBMS -601	TEA BREAK	Web-601	DMS -601	CB2/WEB B1 (lab2/lab1)		TC
TUE	WEB B2/DBMS B1 (Lab2A/Lab2B)			C-601	DMS-601	CLUB ACTIVITY		TC
WED	C-601	DMS-601		DBMS-601	LIBRARY	TC	TC	TC
THU	C B1/DBMSB2 (lab2/lab1)			WEB-601	CN-601	CLUB ACTIVITY		TC
FRI	CN-601	DBMS-601		C-601	Web-601	BC-601	BC-601	TC
SAT	TC	TC		TC	TC	TC	TC	TC

```
<!DOCTYPE html>

<html>

<head>

  <meta charset="UTF-8">

  <title>MCA I A – Class Timetable</title>

</head>

<body>

  <!-- College Header -->

  <table align="center">

    <tr>

      <td align="center">

        <h2>DAYANANDA SAGAR COLLEGE OF ENGINEERING</h2>

        <p>An Autonomous Institute affiliated to Visvesvaraya Technological University (VTU)</p>

        <p>Approved by AICTE and UGC, Accredited by NAAC with "A" grade</p>

      </td>

    </tr>

  </table>


  <hr>
```

```html
<!-- Department & Timetable Heading -->
<table align="center">
   <tr>
     <td align="center">
        <h3>Name of the Department: Master of Computer Applications</h3>
        <h4>Class Timetable: October 2025 – April 2026</h4>
       <!-- <h4>Semester: I A     Room No.: 601 / LAB1 / LAB2</h4>-->
     </td>
   </tr>
</table>


<!-- Timetable -->
<table border="5" cellpadding="5" cellspacing="3" align="center">
      <tr>
    <th colspan="6" align="center">Semester: I A</th>
    <th colspan="5" align="center">Room No.: 601 / LAB1 / LAB2</th>
   </tr>
   <!-- Time header row -->
   <tr>
     <th>DAY</th>
     <th>9:00 AM<br>–<br>10:00 AM</th>
     <th>10:00 AM<br>–<br>11:00 AM</th>
     <th rowspan="7">TEA<br>BREAK</th>
     <th>11:15 AM<br>–<br>12:15 PM</th>
     <th>12:15 PM<br>–<br>01:15 PM</th>
     <th rowspan="7">LUNCH</th>
     <th>02:00 PM<br>–<br>03:00 PM</th>
     <th>03:00 PM<br>–<br>04:00 PM</th>
     <th>04:00 PM<br>–<br>05:00 PM</th>
   </tr>
```

```html
<!-- Monday -->
<tr>
   <th>MON</th>
   <td align=center>CN-601</td>
   <td align=center>DBMS-601</td>
   <td align=center>WEB-601</td>
  <td align=center>DMS-601</td>
   <td align=center colspan="2">CBZ / WEB B1<br>(LAB2 / LAB1)</td>
         <td align=center>TC</td>
</tr>


<!-- Tuesday -->
<tr>
   <th>TUE</th>
   <td  align=center colspan="2">WEB B2 / DBMS B1<br>(LAB2A / LAB2B)</td>
   <td align=center>C-601</td>
   <td align=center>DMS-601</td>
    <td align=center colspan="2">CLUB ACTIVITY</td>


    <td align=center>TC</td>
</tr>


<!-- Wednesday -->
<tr>
   <th>WED</th>
   <td align=center>C-601</td>
   <td align=center>DMS-601</td>
   <td align=center>C-601</td>
   <td align=center>LIBRARY</td>
   <td align=center>TC</td>
   <td align=center>TC</td>
```

```html
      <td align=center>TC</td>
   </tr>


   <!-- Thursday -->
   <tr>
      <th>THU</th>
      <td align=center colspan="2">C B1 / DBMS B2<br>(LAB2 / LAB1)</td>
      <td align=center>WEB-601</td>
      <td align=center>CN-601</td>
      <td align=center colspan="2">CLUB ACTIVITY</td>
      <td align=center>TC</td>
   </tr>


   <!-- Friday -->
   <tr>
      <th>FRI</th>
      <td align=center>CN-601</td>
      <td align=center>DBMS-601</td>
      <td align=center>C-601</td>
      <td align=center>WEB-601</td>
      <td align=center>BC-601</td>
      <td align=center>BC-601</td>
      <td align=center>TC</td>
   </tr>


   <!-- Saturday -->
   <tr>
      <th>SAT</th>
      <td align=center>TC</td>
      <td align=center>TC</td>
      <td align=center>TC</td>
```
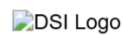
```
            <td align=center>TC</td>

            <td align=center>TC</td>

            <td align=center>TC</td>

            <td align=center>TC</td>

        </tr>

    </table>


    <br><br>


</body>

</html>
```

Ex.No.:2	**Designing a form using HTML**

Problem Statement:

Design and implement a **Student Registration Form** using HTML that collects essential personal and academic details from students as given below.

DAYANANDA SAGAR COLLEGE OF ENGINEERING

DSI Logo

Masters of Computer Application (Autonomous)

Affiliated to VTU - Belagavi

Student Registration Details

Candidate's Name: [   ]

Father's Name: [   ]

Mother's Name: [   ]

Choose a date: [dd - mm - yyyy 🗖]

Email-id: [   ]

Phone Number: [   ]

Religion: [Select ⌄]

Permanent Address:

Gender: ○ Male   ○ Female

Hobbies:
☐ Reading
☐ Sports
☐ Music
☐ Traveling

Submit

```html
<!DOCTYPE html>

<html >

<head>

    <title>Student Registration</title>

  <style>

    body {

      font-family: Arial, sans-serif;

      text-align: center;

      margin: 20px;

    }

    form {

      margin: 0 auto;

      display: inline-block;

      text-align: left;

    }

    label {

      display: inline-block;

      width: 150px;

    }

  </style>

</head>
```

```html
<body>
  <h1>DAYANANDA SAGAR COLLEGE OF ENGINEERING</h1>
  <img src="college-logo.png" alt="DSI Logo" width="100">
  <h2>Masters of Computer Application (Autonomous)</h2>
  <h3>Affiliated to VTU - Belagavi</h3>
  <hr>
  <h3>Student Registration Details</h3>
  <form>
    <label for="candidate-name">Candidate's Name:</label>
    <input type="text" id="candidate-name" name="candidate-name" required><br><br>


    <label for="father-name">Father's Name:</label>
    <input type="text" id="father-name" name="father-name" required><br><br>


    <label for="mother-name">Mother's Name:</label>
    <input type="text" id="mother-name" name="mother-name" required><br><br>
<label for="date">Choose a date:</label>
    <input type="date" id="date" name="date" required>
    <br><br>
<label for="email">Email-id:</label>
    <input type="email" id="email" name="email" required>
    <br><br>
<label for="phone">Mobile Number:</label>
<input type="tel" id="phone" name="phone"
    placeholder="+91 9876543210"
    pattern="\+91\s?[6-9]{1}[0-9]{9}" required>
     <br><br>


    <label for="religion">Religion:</label>
    <select id="religion" name="religion" required>
       <option value="">Select</option>
```

```html
        <option value="hindu">Hindu</option>

        <option value="muslim">Muslim</option>

        <option value="christian">Christian</option>

        <option value="other">Other</option>

    </select><br><br>


    <label for="address">Permanent Address:</label><br>

    <textarea id="address" name="address" rows="4" cols="30" required></textarea><br><br>


    <label>Gender:</label>

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

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

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

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


    <!-- New Checkboxes -->

    <label>Hobbies:</label><br>

    <input type="checkbox" id="reading" name="hobbies" value="reading">

    <label for="reading">Reading</label><br>

    <input type="checkbox" id="sports" name="hobbies" value="sports">

    <label for="sports">Sports</label><br>

    <input type="checkbox" id="music" name="hobbies" value="music">

    <label for="music">Music</label><br>

    <input type="checkbox" id="traveling" name="hobbies" value="traveling">

    <label for="traveling">Traveling</label><br><br>


    <button type="submit">Submit</button>

  </form>

</body>

</html>
```

Ex.No.: 3   **Responsive Webpage Using Bootstrap Grid and HTML5 Features**

Problem Statement: Create a responsive webpage that showcases the integration of multimedia elements (video, images, and icons) in the Bootstrap grid system.

```html
<!DOCTYPE html>

<html lang="en">

<head>

 <meta charset="UTF-8">

 <meta name="viewport" content="width=device-width, initial-scale=1.0">

 <title>Bootstrap Grid with Icons, Images, and Content</title>


 <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/css/bootstrap.min.css" rel="stylesheet">

 <!-- Font Awesome for Icons -->

 <link href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.0.0-beta3/css/all.min.css" rel="stylesheet">

</head>


<body>

 <div class="container   mt-5">

  <h2 class="text-center mb-4">Responsive Grid with features of HTML5</h2>



  <div class="row g-4 justify-content-center align-items-center">

        <!-- Second Row -->

   <!-- Column 1: Video -->

   <div class="col-md-4 text-center">

        <video controls width="100%">

        <source src="https://www.w3schools.com/html/mov_bbb.mp4" type="video/mp4">


        Your browser does not support the video tag.

     </video>

     <p class="text-center">Video 1 - Introduction</p>
```

```html
    <p>Learn to build modern and responsive websites with the latest technologies.</p>
  </div>


  <!-- Column 2: Image -->
  <div class="col-md-4 text-center">
    <img src="img1.jpg"  ></i>
    <h5>Creative Design</h5>
    <p>Unleash your creativity and design visually appealing web pages and apps.</p>
  </div>
  </div>


  <div class="row g-4 justify-content-center align-items-center">


  <!-- Second Row -->


  <!-- Column 1: An Icon -->
  <div class="col-md-4 text-center">
    <i class="fas fa-mobile-alt"></i>
    <h5>App Development</h5>
    <p>Create powerful and user-friendly applications for all platforms.</p>
  </div>


  <!-- Column 2: Another Icon-->
  <div class="col-md-4 text-center">
      <i class="fas fa-envelope me-3" style="font-size: 24px;"></i>
    <h5>Contact Us</h5>
    <p>
    Reach out to our team for personalized solutions.
    <br>
    <a href="mailto:yourmail@gmail.com" class="btn btn-secondary mt-2">Get in Touch</a>
    </p>
```

```
      </div>

    </div>

  </div>



</body>

</html>
```

Ex.No.: 4   **Adding Interactivity with JavaScript**

Problem Statement: Develop an interactive web page using JavaScript that displays dynamic messages, updates styles, and shows elements automatically when the user moves between different input controls, without using any buttons.

```
<!DOCTYPE html>

<html>

<head>

  <title>Interactive Web Page Using JavaScript</title>


  <style>

    body {


      /* center content */

      display: flex;

      justify-content: center;

      align-items: center;

      min-height: 100vh;

    }


    .box{

      width: 350px;

    }


    input, select {
```

```
            width: 100%;

            margin: 8px 0;

            padding: 6px;

        }

    </style>

</head>


<body>


<div class="box">


    <h2>Interactive Web Page Using JavaScript</h2>


    <label>Select page background color:</label>
    <input type="color" id="bgColor" oninput="changePageColor()">


    <label>Enter your name:</label>
    <input type="text" id="username" oninput="showWelcome()" required>


    <p id="welcome"></p>


    <label>Select your course:</label>
    <select id="course" onchange="showCourse()">
        <option value="">--Select--</option>
        <option>MCA</option>
        <option>BCA</option>
        <option>B.Sc Data Science</option>
    </select>


    <p id="courseMsg"></p>
```

```
        </div>

        <script>
            function showWelcome() {
                let name = document.getElementById("username").value;
                if (name !== "") {
                    document.getElementById("welcome").innerHTML =
                        "Welcome, " + name + "!";
                }
            }

            function showCourse() {
                let course = document.getElementById("course").value;
                document.getElementById("courseMsg").innerHTML =
                    "You selected: " + course;
            }

            function changePageColor() {
                let color = document.getElementById("bgColor").value;
                document.body.style.backgroundColor = color;
            }
        </script>

    </body>
</html>
```

Ex.No.11:   **Using Arrays and loops in JavaScript**

Problem Statement: Write a HTML script to get the students marks and find the average, minimum and maximum using JavaScript.

Code:

<!DOCTYPE html>

```html
<html >
<head>
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Student Marks Analysis</title>
    <style>
        body {
            font-family: Arial, sans-serif;
            text-align: center;
            margin: 20px;
        }
        #result {
            margin-top: 20px;
            font-size: 18px;
            font-weight: bold;
        }
        button {
            margin: 10px;
            padding: 10px 20px;
            font-size: 16px;
            cursor: pointer;
        }
        input {
            margin: 5px;
            padding: 5px;
            font-size: 16px;
        }
    </style>
</head>
<body>

    <h2>Student Marks Analysis</h2>
```

<p>Enter marks separated by commas:</p>

<input type="text" id="marksInput" placeholder="e.g., 85, 90, 78, 88, 76">

<button onclick="calculateMarks()">Show Results</button>

<div id="result"></div>

<script>

```javascript
    // Function to get marks from user input
    function inputMarks() {
        let input = document.getElementById("marksInput").value;
        let marks = input.split(",").map(num => parseFloat(num.trim())).filter(num => !isNaN(num));
        return marks;
    }

    // Function to calculate average marks
    function calculateAverage(marks) {
        let sum = 0;
        for (let i = 0; i < marks.length; i++) {
            sum += marks[i];
        }
        return marks.length ? sum / marks.length : 0;
    }

    // Function to find the highest and lowest marks
    function findHighLow(marks) {
        return marks.length ? { highest: Math.max(...marks), lowest: Math.min(...marks) } : { highest: "N/A", lowest: "N/A" };
    }

    // Function to calculate and display results
    function calculateMarks() {
```

```
      let studentMarks = inputMarks();

      if (studentMarks.length === 0) {

        document.getElementById("result").innerHTML = "<p>Please enter valid marks.</p>";

          return;

      }


      let average = calculateAverage(studentMarks);

      let { highest, lowest } = findHighLow(studentMarks);


      // Display results in the browser

      document.getElementById("result").innerHTML = `

        <p>Student Marks: ${studentMarks.join(", ")}</p>

        <p>Average Marks: ${average.toFixed(2)}</p>

        <p>Highest Marks: ${highest}</p>

        <p>Lowest Marks: ${lowest}</p>

      `;

    }

  </script>


</body>

</html>
```

Ex.No.:6 Creating and Parsing a XML File with Book Details in JavaScript

Problem Statement: Write JavaScript code to create a XML file containing book details such as Title, author, and year of publication, parse it, and display it.

```
<!DOCTYPE html>

<html>

<head>

  <title>Read XML without Server</title>

  <style>

    body {
```

```
        font-family: Arial;

        margin: 30px;

      }

      .data-container {

        border: 1px solid #aaa;

        padding: 15px;

        background: #f9f9f9;

        margin-top: 10px;

      }

    </style>

</head>


<body>


<h2>Load XML File</h2>


<input type="file" id="xmlFile" accept=".xml">

<div id="output" class="data-container">No data loaded</div>


<script>

document.getElementById("xmlFile").addEventListener("change", function(event)

{

   const file = event.target.files[0];

   if (!file) return;


   const reader = new FileReader();

   reader.onload = function(e)

    {

      const xmlText = e.target.result;

      const parser = new DOMParser();

      const xmlDoc = parser.parseFromString(xmlText, "text/xml");
```

```javascript
      const books = xmlDoc.getElementsByTagName("book");

      const output = document.getElementById("output");

      output.innerHTML = "";


      for (let i = 0; i < books.length; i++)

      {

        const title = books[i].getElementsByTagName("title")[0].textContent;

        const author = books[i].getElementsByTagName("author")[0].textContent;

        const year = books[i].getElementsByTagName("year")[0].textContent;


        output.innerHTML += "<p><b>" + title + "</b> - " +

                  author + " (" + year + ")</p>";

      }

    };
    reader.readAsText(file);
});
</script>


</body>
</html>
```

Ex.No.: 7 – Creating and Parsing a JSON File with Book Details using JavaScript

Problem Statement

Create a **JSON file** containing book details such as **title, author, and year of publication**, and write a **JavaScript program** to **parse and display** the book details in a web page.

Step 1: Create a JSON file

 File Name: data.json

```json
{
  "library": {
    "books": [
      { "title": "JavaScript Fundamentals", "author": "John Smith", "year": 2021 },
      { "title": "Web Technologies", "author": "Mary Johnson", "year": 2020 },
      { "title": "HTML and CSS", "author": "David Miller", "year": 2019 }
    ]
  }
}
```

Step 2: Create an HTML file to parse the JSON

File Name: ex7.html

```html
<!DOCTYPE html>
<html>
<head>
    <title>Read JSON without Server</title>
    <style>
      body {
          font-family: Arial;
          margin: 30px;
      }
      .data-container {
          border: 1px solid #aaa;
          padding: 15px;
          background: #f9f9f9;
          margin-top: 10px;
      }
    </style>
</head>

<body>
```

Load JSON File

```html
<!-- Select JSON file -->
<input type="file" id="jsonFile" accept=".json">
<div id="output" class="data-container">No data loaded</div>

<script>
document.getElementById("jsonFile").addEventListener("change", function (event) {

  const file = event.target.files[0];
  if (!file) return;

  const reader = new FileReader();

  reader.onload = function (e) {
    // Read JSON text
    const jsonText = e.target.result;

    // Parse JSON
    const data = JSON.parse(jsonText);

    // Access books array
    const books = data.library.books;

    const output = document.getElementById("output");
    output.innerHTML = "";

    // Display book details
    books.forEach((book, index) => {
      output.innerHTML += `
        <p>
```

```
        <b>${index + 1}. ${book.title}</b> -

        ${book.author} (${book.year})

      </p>

    `;

    });

  };


  reader.readAsText(file);

});

</script>


</body>

</html>
```

Ex.No.:8 Database Operations with PHP and MySQL

Problem Statement:

a. Establish a connection to MySQL and perform CRUD operations.
b. Create a login system using session management.
c. Display records dynamically from the database.

//Set up MySQL database (phpMyAdmin or MySQL CLI).

```sql
CREATE DATABASE bookstore;

USE bookstore;


CREATE TABLE users (

  id INT AUTO_INCREMENT PRIMARY KEY,

  username VARCHAR(255) NOT NULL UNIQUE,

  password VARCHAR(255) NOT NULL

);


CREATE TABLE books (

  id INT AUTO_INCREMENT PRIMARY KEY,

  title VARCHAR(255) NOT NULL,

  author VARCHAR(255) NOT NULL,
```

```
    year INT NOT NULL
);


//Configure db_config.php for database connection.

<?php

$servername = "localhost";

$username = "root"; // Change as per your database

$password = ""; // Change as per your database

$dbname = "bookstore"; // Change as per your database name


// Create connection

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


// Check connection

if ($conn->connect_error) {

    die("Connection failed: " . $conn->connect_error);

}

?>
```

//Test registration and login (register.php, login.php).

// register.php

```
<?php

include 'db_config.php';


if ($_SERVER["REQUEST_METHOD"] == "POST") {

    $username = $_POST['username'];

    $password = password_hash($_POST['password'], PASSWORD_DEFAULT); // Hash the password


    $sql = "INSERT INTO users (username, password) VALUES ('$username', '$password')";


    if ($conn->query($sql) === TRUE) {

        echo "Registration successful. <a href='login.php'>Login Here</a>";
```

```php
    } else {

        echo "Error: " . $conn->error;

    }

}

?>


<form method="post">

    Username: <input type="text" name="username" required><br>

    Password: <input type="password" name="password" required><br>

    <button type="submit">Register</button>

</form>


//login.php

<?php

session_start();

include 'db_config.php';


if ($_SERVER["REQUEST_METHOD"] == "POST") {

    $username = $_POST['username'];

    $password = $_POST['password'];


    $sql = "SELECT * FROM users WHERE username='$username'";

    $result = $conn->query($sql);


    if ($result->num_rows > 0) {

        $user = $result->fetch_assoc();

        if (password_verify($password, $user['password'])) {

            $_SESSION['username'] = $username;

            echo "Login successful! <a href='home.php'>Go to Home</a>";

        } else {

            echo "Invalid password!";
```

```php
        }
    } else {
        echo "User not found!";
    }
}
?>
```

```html
<form method="post">
    Username: <input type="text" name="username" required><br>
    Password: <input type="password" name="password" required><br>
    <button type="submit">Login</button>
</form>
```

Ensure session-based authentication (home.php, logout.php).

//home.php

```php
<?php
session_start();
if (!isset($_SESSION['username'])) {
    header("Location: login.php");
    exit();
}
echo "Welcome, " . $_SESSION['username'];
?>
```

```html
<br>
<a href="logout.php">Logout</a>
```

// logout.php

```php
<?php
session_start();
session_destroy();
header("Location: login.php");
?>
```

//Perform CRUD operations on books (books.php).

```php
<?php
include 'db_config.php';


// Create Record
if (isset($_POST['add'])) {
    $title = $_POST['title'];
    $author = $_POST['author'];
    $year = $_POST['year'];


    $sql = "INSERT INTO books (title, author, year) VALUES ('$title', '$author', '$year')";
    $conn->query($sql);
}


// Read Records
$result = $conn->query("SELECT * FROM books");


// Update Record
if (isset($_POST['update'])) {
    $id = $_POST['id'];
    $title = $_POST['title'];
    $author = $_POST['author'];
    $year = $_POST['year'];


    $sql = "UPDATE books SET title='$title', author='$author', year='$year' WHERE id=$id";
    $conn->query($sql);
}


// Delete Record
if (isset($_GET['delete'])) {
    $id = $_GET['delete'];
```

```php
    $conn->query("DELETE FROM books WHERE id=$id");
}


?>
```

```html
<form method="post">
    Title: <input type="text" name="title" required>
    Author: <input type="text" name="author" required>
    Year: <input type="number" name="year" required>
    <button type="submit" name="add">Add Book</button>
</form>


<h2>Books List</h2>
<table border="1">
    <tr>
        <th>Title</th>
        <th>Author</th>
        <th>Year</th>
        <th>Action</th>
    </tr>
    <?php while ($row = $result->fetch_assoc()): ?>
    <tr>
        <td><?php echo $row['title']; ?></td>
        <td><?php echo $row['author']; ?></td>
        <td><?php echo $row['year']; ?></td>
        <td>
            <a href="?delete=<?php echo $row['id']; ?>">Delete</a>
            <form method="post">
                <input type="hidden" name="id" value="<?php echo $row['id']; ?>">
                <input type="text" name="title" value="<?php echo $row['title']; ?>" required>
                <input type="text" name="author" value="<?php echo $row['author']; ?>" required>
```

```
            <input type="number" name="year" value="<?php echo $row['year']; ?>" required>

            <button type="submit" name="update">Update</button>

        </form>

      </td>

   </tr>

   <?php endwhile; ?>

</table>
```

CRUD operations using PHP
Creating an XML file using PHP
Reading an XML file and displaying its contents using PHP

Ex.No.:9   **Create an xml file using PHP**

Problem Statement: Write a PHP program to create an xml file "books_file.xml" with book details.

Program:

```php
<?php

include 'db_config.php';

// Query to fetch data from the database

 if (!$result)

{

   die("Query Failed: " . $conn->error);

}

// Create an XML structure

$xml = new SimpleXMLElement('<?xml version="1.0" encoding="UTF-8"?><books></books>');

while ($row = $result->fetch_assoc())

{

  $book = $xml->addChild('book');

  $book->addChild('id', $row['id']);

  $book->addChild('title', $row['title']);

  $book->addChild('author', $row['author']);

  $book->addChild('year', $row['year']);

}
```

```php
// Save the XML content to a file

$file_path = 'books_file.xml';

$xml->asXML($file_path);


// Set the header to output as XML

header('Content-Type: text/xml');

echo $xml->asXML();

?>
```

Ex.No.:10   **Read an xml file and display its contents using PHP**

Problem Statement: Write a PHP program to open an xml file "books_file.xml" and display its contents.

Program:

```php
<?php
// Load XML file

$xml = simplexml_load_file('books_file.xml') or die("Error: Cannot load XML file.");


// Display parsed XML data

echo "<h2>Parsed XML Data</h2>";

echo "<table border='1'>";

echo "<tr><th>Title</th><th>Author</th><th>Year</th></tr>";

foreach ($xml->book as $book)

{

  echo "<tr>";

  echo "<td>" . $book->title. "</td>";

  echo "<td>" . $book->author. "</td>";

  echo "<td>" . $book->year ."</td>";

  echo "</tr>";

}

echo "</table>";
```

?>