Lab Cycle 3

CO4: Do Client-side & Server-side scripting

Program # 13

13. Build a PHP code to store name of students in an array and display it using print_r function. Sort and display the same using asort & arsort functions.

PROGRAM CODE:

```
<!DOCTYPE html>
<html>
<head>
   <title>ArraySort</title>
   <style>
   body{
     max-width: 620px;
     margin: auto;
     border-style: outset;
   }
  </style>
  </head>
  <body><br>
   <center><h2>Sorting Arrays-PHP</h2></center><br>
<?php
$students = array("Meenu", "Anu", "Binu", "Jinu");
echo "<b>Original indexed array: </b>";
print_r($students);
sort($students);
echo "<br><b>Sorted array (sort): </b>";
print_r($students);
rsort($students);
echo "<br><b>Sorted array (rsort): </b>";
print_r($students);
$age = array("Meenu"=>"23", "Anu"=>"25", "Binu"=>"20","Jinu"=>"28");
echo "<b><br><br>Original associated array: </b>";
print_r($age);
asort($age);
echo "<br><b>Sorted array (asort): </b>";
print_r($age);
arsort($age);
echo "<br><b>Sorted array (arsort): </b>";
print_r($age);
ksort($age);
```

```
echo "<br><b>Sorted array (ksort): </b>";
print_r($age);
krsort($age);
echo "<br><b>Sorted array (krsort): </b>";
print_r($age);
?>
<br><br><br>
</body>
</html>
```

OUTPUT:

Sorting Arrays-PHP

Original indexed array: Array ([0] => Meenu [1] => Anu [2] => Binu [3] => Jinu)
Sorted array (sort): Array ([0] => Anu [1] => Binu [2] => Jinu [3] => Meenu)
Sorted array (rsort): Array ([0] => Meenu [1] => Jinu [2] => Binu [3] => Anu)

Original associated array: Array ([Meenu] => 23 [Anu] => 25 [Binu] => 20 [Jinu] => 28)
Sorted array (asort): Array ([Binu] => 20 [Meenu] => 23 [Anu] => 25 [Jinu] => 28)
Sorted array (arsort): Array ([Jinu] => 28 [Anu] => 25 [Meenu] => 23 [Binu] => 20)
Sorted array (ksort): Array ([Anu] => 25 [Binu] => 20 [Jinu] => 28 [Meenu] => 23)
Sorted array (krsort): Array ([Meenu] => 23 [Jinu] => 28 [Binu] => 20 [Anu] => 25)

Program # 14

14.Build a PHP code to store name of Indian Cricket players in an array and display the same in HTML table.

PROGRAM CODE:

```php
<?php
$indian_cricket_players = array("SACHIN TENDULKAR", "MS DHONI","ROHIT SHARMA",
"KL RAHUL", "HARDIK PANDYA", "MOHAMMED SHAMI", "VIRAT KOHLI");
?>
<!DOCTYPE html>
<html>
<head>
<title>Indian Cricket Players</title>
<style>
 body{
 max-width: 750px;
 margin: auto;
 border-style: outset;
 }
 table {
 width: 100%;
 border-collapse: collapse;
 }
 th, td {
 padding: 15px;
 text-align: left;
 border-bottom: 1px solid #ddd;
 }
</style>
</head>
<body>
<center><h2>List of Indian Cricket Players</h2></center>
<table>
<tr>
<th>Name</th>
</tr>
<?php
 foreach($indian_cricket_players as $player) {
 echo "<tr><td>$player</td></tr>";
 }
 ?>
 </table>
</body>
</html>
```

OUTPUT:

pg-html.php

List of Indian Cricket Players
Name
SACHIN TENDULKAR
MS DHONI
ROHIT SHARMA
KL RAHUL
HARDIK PANDYA
MOHAMMED SHAMI
VIRAT KOHLI

Program # 15

15.Design a registration form in HTML, and do necessary validations using PHP

PROGRAM CODE:

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>MITS MCA Registration Form</title>
<style>
  body {
    font-family: Arial, sans-serif;
    background-color: white;
    margin: 0;
    padding: 0;
    box-sizing: border-box;
  }
  form {
    max-width: 600px;
    margin: 20px auto;
    padding: 20px;
    background: #fff;
    border-radius: 8px;
    box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
  }
  label {
    display: block;
    margin-bottom: 8px;
  }
  input,
  select {
    width: 100%;
```

```
  padding: 8px;

  margin-bottom: 16px;

  box-sizing: border-box;

  }

  button {

  background-color: #4caf50;

  color: #fff;

  padding: 10px 15px;

  border: none;

  border-radius: 4px;

  cursor: pointer;

  }
 button:hover {

  background-color: #45a049;

  }
 </style>
</head>
<body>
 <form id="registrationForm" action="<?php echo htmlspecialchars($_SERVER["PHP_SELF"]); ?>"
 method="post"
 onsubmit="return validateForm()">
<h2>
<center>MCA REGISTRATION FORM</center>
</h2>
 <label for="fullName">Full Name<span style="color: red;">*</span>:</label>
 <input type="text" id="fullName" name="fullName" required>
  <label for="email">Email<span style="color: red;">*</span>:</label>
 <input type="email" id="email" name="email" required>
 <label for="phoneNumber">Phone Number<span style="color: red;">*</span>:</label>
 <input type="tel" id="phoneNumber" name="phoneNumber" pattern="[0-9]{10}" required>
    <label for="gender">Gender<span style="color: red;">*</span>:</label>
  <select id="gender" name="gender" required>
  <option value="male">Male</option>
  <option value="female">Female</option>
  <option value="other">Other</option>
  </select>
  <label for="qualification">Qualification<span style="color: red;">*</span>:</label>
  <input type="text" id="qualification" name="qualification" required>
```
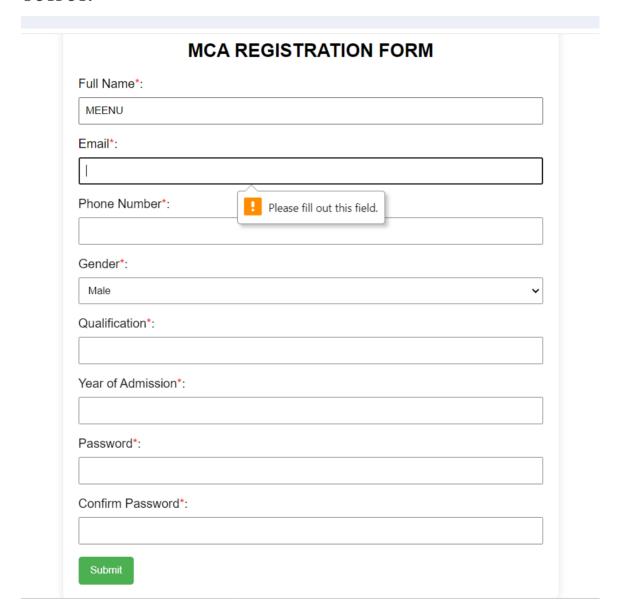
```html
<label for="yearOfAdmission">Year of Admission<span style="color: red;">*</span>:</label>
<input type="number" id="yearOfAdmission" name="yearOfAdmission" min="2000" max="2023" required>
<label for="password">Password<span style="color: red;">*</span>:</label>
<input type="password" id="password" name="password" required>


<label for="confirmPassword">Confirm Password<span style="color: red;">*</span>:</label>
<input type="password" id="confirmPassword" name="confirmPassword" required>
<br>
<button type="submit" name="submit">Submit</button>
</form>


<?php
  if ($_SERVER["REQUEST_METHOD"] == "POST") {
    // Collect form data
    $fullName = $_POST["fullName"];

    $email = $_POST["email"];

    $phoneNumber = $_POST["phoneNumber"];

    $gender = $_POST["gender"];

    $qualification = $_POST["qualification"];

    $yearOfAdmission = $_POST["yearOfAdmission"];

    $password = $_POST["password"];

    $confirmPassword = $_POST["confirmPassword"];


    // Validate form data
    $errors = array();
if (empty($fullName) || empty($email) || empty($phoneNumber) || empty($gender) || empty($qualification) ||
empty($yearOfAdmission) || empty($password) || empty($confirmPassword) ) {
        $errors[] = "All fields must be filled out";
    }

    if (!preg_match("/^\d{10}$/", $phoneNumber)) {
        $errors[] = "Phone number must be 10 digits without spaces or dashes";
    }

    if ($password !== $confirmPassword) {
        $errors[] = "Password and Confirm Password do not match";
    }
```
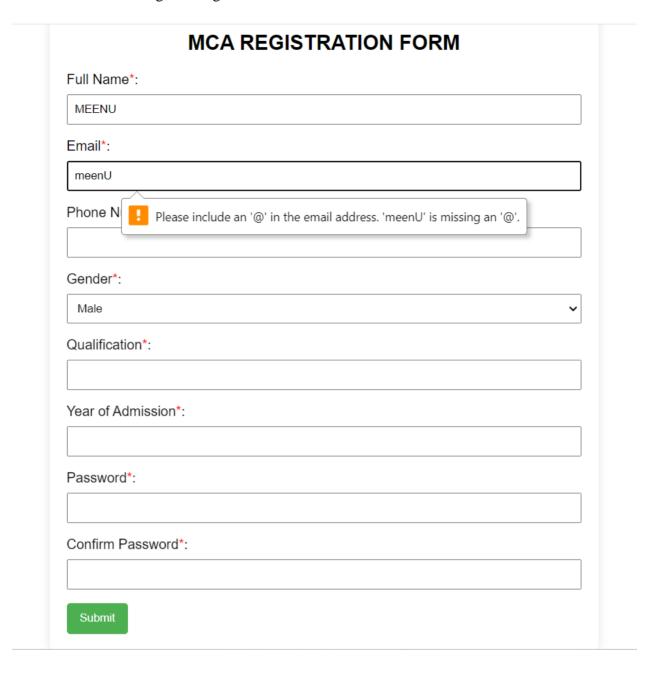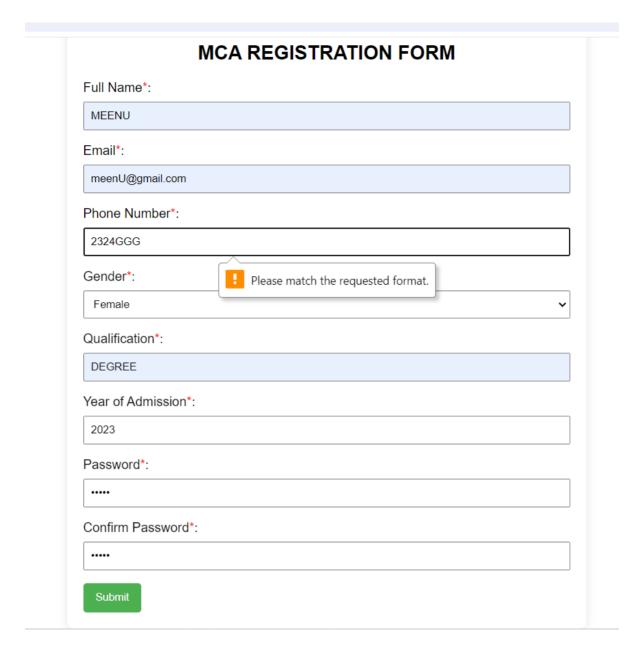
```php
// Display errors or process the form further
    if (!empty($errors)) {
        echo "<div style='color: red; margin: 20px;'>";
        foreach ($errors as $error) {
            echo "<p>$error</p>";
        }
        echo "</div>";
    } else {
        // Process the form data further, for example, save it to a database
        echo "<div style='color: green; margin: 20px;'><p>Form submitted successfully!</p></div>";
    }
}
?>
```

```javascript
<script>
 function validateForm() {
 var fullName = document.getElementById('fullName').value;
  var email = document.getElementById('email').value;
  var phoneNumber = document.getElementById('phoneNumber').value;
  var gender = document.getElementById('gender').value;
  var qualification = document.getElementById('qualification').value;
  var yearOfAdmission = document.getElementById('yearOfAdmission').value;
  var password = document.getElementById('password').value;
  var confirmPassword = document.getElementById('confirmPassword').value;

 if (fullName === "" || email === "" || phoneNumber === "" || gender === "" || qualification === "" ||
 yearOfAdmission === "" || password === "" || confirmPassword === "" ) {
    alert("All fields must be filled out");
    return false;
  }
  if (!/^\d{10}$/.test(phoneNumber)) {
   alert("Phone number must be 10 digits without spaces or dashes");
   return false;
  }
  if (password !== confirmPassword) {
   alert("Password and Confirm Password do not match");
   return false;
  }
```

```
    return true;
  }
</script>
</body>
</html>
```

OUTPUT:

MCA REGISTRATION FORM

Full Name*:

MEENU

Email*:

meenU

Phone N[!] Please include an '@' in the email address. 'meenU' is missing an '@'.

Gender*:

Male

Qualification*:

Year of Admission*:

Password*:

Confirm Password*:

Submit

MCA REGISTRATION FORM

Full Name*:

MEENU

Email*:

meenU@gmail.com

Phone Number*:

2324GGG

⚠ Please match the requested format.

Gender*:

Female ∨

Qualification*:

DEGREE

Year of Admission*:

2023

Password*:

•••••

Confirm Password*:

•••••

Submit

localhost says

Password and Confirm Password do not match

OK

Full Name*:

MEENU

Email*:

meenU@gmail.com

Phone Number*:

2324354555

Gender*:

Female

Qualification*:

DEGREE

Year of Admission*:

2023

Password*:

••••••

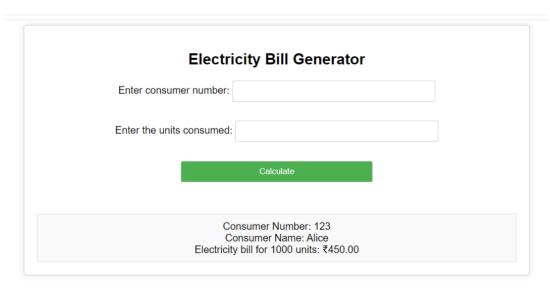Confirm Password*:

•••••••

Submit

Program # 16

16.Compose Electricity bill from user input based on a given tariff using PHP.

PROGRAM CODE:

```php
<?php
function calculateElectricityBill($units) {
 // Define tariff rates and thresholds
 $rateFirstTier = 0.2; // Rate for the first tier
 $rateSecondTier = 0.3; // Rate for the second tier
 $rateAboveSecondTier = 0.5; // Rate for units above the second tier
  $firstTierUnits = 100; // Units for the first tier
  $secondTierUnits = 200; // Units for the second tier

 // Calculate bill based on the tiered structure
  if ($units <= $firstTierUnits) {
     $totalBill = $units * $rateFirstTier;
  } elseif ($units <= $secondTierUnits) {
     $totalBill = $firstTierUnits * $rateFirstTier + ($units - $firstTierUnits) * $rateSecondTier;
  } else {
     $totalBill = $firstTierUnits * $rateFirstTier + ($secondTierUnits - $firstTierUnits) *
  $rateSecondTier + ($units - $secondTierUnits) * $rateAboveSecondTier;
  }
 return $totalBill;
}
// Simulated consumer data
$consumerData = [
    "123" => "Alice",
    "456" => "Bob",
    "789" => "Charlie",
    "1234" => "Sara"
];
// Initialize variables
$billAmount = ""; // Initialize $billAmount here
$consumerNumber = "";
$consumerName = "";

// Check if form is submitted
if ($_SERVER["REQUEST_METHOD"] == "POST") {
    $unitsUsed = $_POST["units"];
    $consumerNumber = isset($_POST["userNumber"]) ? $_POST["userNumber"] : "";

    // Validate input to ensure it's valid
    if (
```

```php
      is_numeric($unitsUsed) && $unitsUsed >= 0 && floor($unitsUsed) == $unitsUsed &&
      array_key_exists($consumerNumber, $consumerData)
  ) {
      $consumerName = $consumerData[$consumerNumber];
    $billAmount = calculateElectricityBill($unitsUsed);
  } else {
      $billAmount = "Please enter valid details.";
  }
}
?>
```

```html
<!DOCTYPE html>
<html>
<head>
<title>Electricity Bill Calculator</title>
<style>
 body {
 font-family: Arial, sans-serif;
    }
    .container {
       width: 50%;
       margin: 0 auto;
       text-align: center;
       border: 1px solid #ccc;
       padding: 20px;
       border-radius: 5px;
       box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
    }
    h2 {
       margin-bottom: 20px;
    }
    input[type="text"], input[type="submit"] {
       padding: 8px;
       margin-bottom: 30px;
       border-radius: 3px;
       border: 1px solid #ccc;
       width: 40%;
    }
    input[type="submit"] {
       background-color: #4CAF50;
       color: white;
       cursor: pointer;
    }
    .result {
       margin-top: 20px;
       padding: 10px;
       border: 1px solid #ddd;
       border-radius: 3px;
       background-color: #f9f9f9;
    }
</style>
```

```
  </head>
  <body>
     <div class="container">
     <h2>Electricity Bill Generator</h2>
     <form method="post" action="<?php echo $_SERVER['PHP_SELF']; ?>">
      <label>Enter consumer number:</label>
      <input type="text" name="userNumber" required>
      <br>
      <label>Enter the units consumed:</label>
      <input type="text" name="units" required>
      <br>
      <input type="submit" value="Calculate">
      </form>

      <?php if ($billAmount !== ""): ?>
      <div class="result">
           <?php
            if (is_numeric($billAmount)) {
             echo "Consumer Number: " . $consumerNumber . "<br>";
             echo "Consumer Name: " . $consumerName . "<br>";
             echo "Electricity bill for " . $_POST["units"] . " units: ₹" . number_format($billAmount, 2);
             } else {
                echo $billAmount;
             }
   ?>
 </div>
<?php endif; ?>
</div>
</body>
</html>
```

OUTPUT:

Electricity Bill Generator

Enter consumer number: [   ]

Enter the units consumed: [   ]

[Calculate]

Consumer Number: 123
Consumer Name: Alice
Electricity bill for 1000 units: ₹450.00

Lab Cycle 4

CO3:Design front end web page and connect to the back-end databases.

Program # 17

17.Develop a PHP program to connect to a database and retrieve data from a table and show the details in a neat format.

PROGRAM CODE:

```
<html>
<center>
<?php
$conn = mysqli_connect("localhost", "root", "", "college");
if (!$conn) {
   echo "Connection Failed" . "<br>";
} else {
   echo "Connected successfully" . "<br>";
}

$sql = "INSERT INTO studs (Rollno, Name, Age, course_id) VALUES (1, 'Meenu', 20,
111),(2,'Anu',21,112),(3,'Binu', 22, 113),(4,'Vinu',23,114)";

if (mysqli_query($conn, $sql)) {
   echo "Inserted Successfully" . "<br>";
} else {
   echo "Insertion Failed" . "<br>";
}

$select_query = "SELECT * FROM studs";
$result = mysqli_query($conn, $select_query);

if (mysqli_num_rows($result) > 0)
 {
   echo "<center><h1 style='color: #088F8F'>Student Table</h1></center>";
   echo "<center><table border='1' cellspacing='1' cellpadding='10' align='center' bgcolor='white'>
       <tr>
   <th>Roll No</th>
   <th>Name</th>
   <th>Age</th>
   <th>Course ID</th>
</tr>";
     while ($row = mysqli_fetch_assoc($result)) {
```

```
    echo "<tr>";
    echo "<td>" . $row['Rollno'] . "</td>";
    echo "<td>" . $row['Name'] . "</td>";
    echo "<td>" . $row['Age'] . "</td>";
    echo "<td>" . $row['course_id'] . "</td>";
    echo "</tr>";
  }
  echo "</table></center>";
} else {
  echo "No records found in the student table";
}
mysqli_close($conn);
?>
</center>
</html>
```

OUTPUT:

Rollno	Name	Age	course_id
1	Meenu	20	111
2	Anu	21	112
3	Binu	22	113
4	Vinu	23	114

Connected successfully
Inserted Successfully

Student Table

Roll No	Name	Age	Course ID
1	Meenu	20	111
2	Anu	21	112
3	Binu	22	113
4	Vinu	23	114

Lab Cycle 5

CO5:Develop Web Applications

Program # 18

18..Develop an application in PHP and MySQL, to accept book details viz.Book id, title, authors, edition and publisher from an HTML form in a web page and save the records in a database and to search for a book using the author name and display the search results

---

PROGRAM CODE:

```
<html>
<DOCTYPE! html>
<html>
<head>
<style>
#regform{
  border: 5px outset red;
  background-color:lightgreen;
  text-align: center;
  width: 600;
  height: 700;
  margin:auto;

}
table,tr,td,th{
  border: 1px solid black;
}
</style>
</head>
<body>

<div id="regform">
<h2> BOOKS</h2>
<form name="books"  action="books.php" method="post">
```

```
<br>BookId:<input type="text" name="BookId"/ > <br><br>
<br>Title:<input type="text" name="Title"/ ><br><br>
<br>Author<input type="text" name="Author" /> <br><br>
<br>Edition<input type="text" name="Edition" /><br><br>
<br>Publisher<input type="text" name="Publisher"/ > <br><br>

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

</form>

<h4>Search Books</h4>

<form name="searchForm"  action="books.php" method="post">
<br>Author name:<input type="text"  name="Author" >
<input type="submit" name="search" value="SEARCH"><br><br>

</form>


<?php
// Connect to DB

$conn= mysqli_connect("localhost","root","","bookss");
if (!$conn) {
    die("Connection failed: " . mysqli_connect_error());
}
echo "Connected successfully<br>";

if (isset($_POST['submit']))
{

 $BookId = $_POST['BookId'];
 $Title= $_POST['Title'];
 $Author = $_POST['Author'];
 $Edition = $_POST['Edition'];
 $Publisher = $_POST['Publisher'];
 echo " The values are: ".'<br>';
```
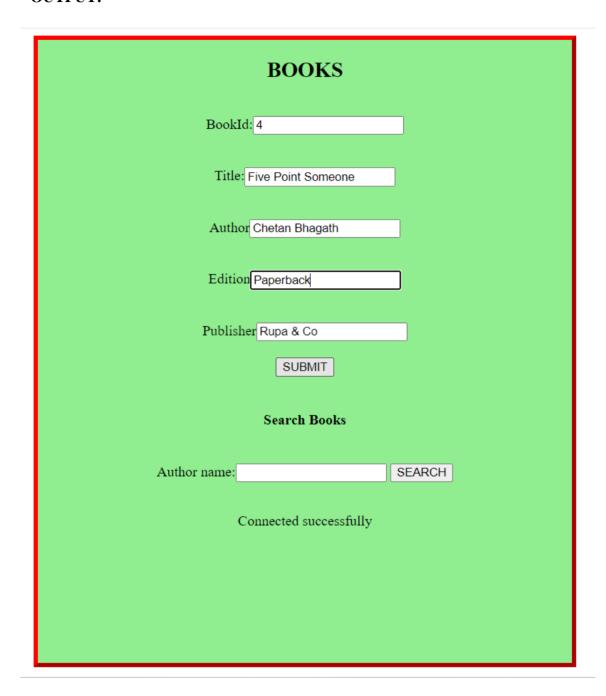
```php
echo "BookId:" .$BookId.'<br>';

echo "Title:" .$Title.'<br>';

echo "Author:" .$Author.'<br>';

echo "Edition:" .$Edition.'<br>';

echo "Publisher:" .$Publisher.'<br>';


//Connecting to database and inserting the values
$sql="insert into booksdatass values('$BookId', '$Title', '$Author','$Edition', '$Publisher')";
if (mysqli_query($conn, $sql)) {
  echo "<br>New record created successfully";
} else {

     echo "Error: " . $sql . "<br>" . mysqli_error($conn);

}
}

//Connecting to database and Searching for tuples of given Author

if(isset($_POST['search']))
{
  $Author = $_POST['Author'];

  $sql="select * from booksdatass where Author='$Author'";

  $res= mysqli_query($conn, $sql);
  $totRows = mysqli_num_rows($res);
  if($totRows==0)
  {
   echo "No records found!";
  }
   echo "<center><table><tr>";
  echo "<th>BookId</th><th>Title</th><th>Author</th><th>Edition</th><th>Publisher</th>";
  echo "</tr><tr>";

  while($row = mysqli_fetch_assoc($res))
  {
    echo "<td>".$row["BookId"]."</td>";
    echo "<td>".$row["Title"]."</td>";
```

```php
    echo "<td>".$row["Author"]."</td>";

    echo "<td>".$row["Edition"]."</td>";

    echo "<td>".$row["Publisher"]."</td>";

    echo "</tr>";

  }
  echo "</table></center>";
}
?>
</div>
</body>
</html>
```

OUTPUT:

BOOKS

BookId: [_____]

Title: [_____]

Author [_____]

Edition [_____]

Publisher [_____]

[SUBMIT]

Search Books

Author name: [_____] [SEARCH]

Connected successfully
The values are:
BookId:4
Title:Five Point Someone
Author:Chetan Bhagath
Edition:Paperback
Publisher:Rupa & Co

New record created successfully

BookId	Title	Author	Edition	Publisher
1	To Kill a Mockingbir	Harper Lee	50th Anniversary Edi	Harper Perennial Mo
2	The Great Gatsby	F. Scott Fitzgerald	Paperback	Scribner
3	Sapiens:A brief Hist	Yuval Noah Harari	Reprint	Harper Perennial
4	Five Point Someone	Chetan Bhagath	Paperback	Rupa & Co

BOOKS

BookId: [_____]

Title: [_____]

Author [_____]

Edition [_____]

Publisher [_____]

[SUBMIT]

Search Books

Author name: [_____] [SEARCH]

Connected successfully

BookId	Title	Author	Edition	Publisher
4	Five Point Someone	Chetan Bhagath	Paperback	Rupa & Co