Lab: 1

1. WAP to check whether the given number is odd or even.

```php
<?php
function checkOddEven($number) {
if ($number % 2 == 0) {
    return "$number is even.";
  } else {
    return "$number is odd.";
  }
}
$numberToCheck = 10;
$result = checkOddEven($numberToCheck);
echo $result;
?>
```

2. WAP to check whether the given number is positive, negative or Zero.

```php
<?php
function checkNumber($number) {
  if ($number > 0) {
    return "$number is positive.";
  } elseif ($number < 0) {
    return "$number is negative.";
  } else {
    return "$number is zero.";
  }
}
$numberToCheck = 10;
$result = checkNumber($numberToCheck);
echo $result;
?>
```

3. WAP to print name of month based on given number of month (i.e. 1 -> January, 2 -> February...).

```php
<?php
function getMonthName($monthNumber) {
  $months = array(
    1 => "January",
    2 => "February",
    3 => "March",
    4 => "April",
    5 => "May",
```
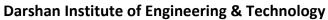
```php
      6 => "June",
      7 => "July",
      8 => "August",
      9 => "September",
      10 => "October",
      11 => "November",
      12 => "December"
   );
   if (isset($months[$monthNumber])) {
      return $months[$monthNumber];
   } else {
      return "Invalid month number";
   }
}
$monthNumberToGet = 1; // You can change this number
$result = getMonthName($monthNumberToGet);
echo "Month number $monthNumberToGet corresponds to: $result";
?>
```

4. WAP to find greatest number from 3 number.

```php
<?php
function findGreatestNumber($num1, $num2, $num3) {
   if ($num1 >= $num2 && $num1 >= $num3) {
      return $num1;
   } elseif ($num2 >= $num1 && $num2 >= $num3) {
      return $num2;
   } else {
      return $num3;
   }
}
$number1 = 10;
$number2 = 5;
$number3 = 15;
$greatest = findGreatestNumber($number1, $number2, $number3);
echo "The greatest number among $number1, $number2, and $number3 is: $greatest";
?>
```

5. WAP to check given number is palindrome or not.

```php
<?php
function isPalindrome($number) {
   $numberStr = (string)$number;
   $reversedStr = strrev($numberStr);
```

```php
    if ($numberStr === $reversedStr) {
        return "$number is a palindrome.";
    } else {
        return "$number is not a palindrome.";
    }
}
$numberToCheck = 121;
$result = isPalindrome($numberToCheck);
echo $result;
?>
```

Lab: 2

1. WAP to print class of result based on percentage using switch statement (i.e. less than 40% > Fail, 40% to 50% -> Pass Class, 50% to 60% -> Second Class, 60% to 70% -> First Class, above 70% -> Distinction).

```php
<?php
function getResultClass($percentage) {
  switch (true) {
    case ($percentage < 40):
      return "Fail";
    case ($percentage >= 40 && $percentage < 50):
      return "Pass Class";
    case ($percentage >= 50 && $percentage < 60):
      return "Second Class";
    case ($percentage >= 60 && $percentage < 70):
      return "First Class";
    case ($percentage >= 70):
      return "Distinction";
    default:
      return "Invalid percentage";
  }
}
$percentage = 75;
$resultClass = getResultClass($percentage);
echo "With $percentage%, you have achieved: $resultClass";
?>
```

2. WAP to print first n numbers using for, while and do while loop.

For Loop
```php
<?php
$n = 10;
echo "Using for loop:\n";
for ($i = 1; $i <= $n; $i++) {
  echo $i . " ";  }
?>
```

While Loop
```php
<?php
$n = 10;
echo "Using while loop:\n";
$i = 1;
while ($i <= $n) {
```

```php
   echo $i . " ";
   $i++;
}
?>
```

Do While Loop
```php
<?php
$n = 10;
echo "Using do-while loop:\n";
$i = 1;
do {
   echo $i . " ";
   $i++;
} while ($i <= $n);
?>
```

3. WAP to print first n odd numbers using for, while and do while loop.

For Loop
```php
<?php
$n = 10;
echo "Using for loop:\n";
for ($i = 1; $i <= 2 * $n; $i += 2) {
   echo $i . " ";
}
?>
```

While Loop
```php
<?php
$n = 10;
echo "Using while loop:\n";
$i = 1;  $count = 0;
while ($count < $n) {
   if ($i % 2 != 0) {
     echo $i . " ";
     $count++;
   }
   $i++;   }
?>
```

Do While Loop
```php
<?php
$n = 10;
echo "Using do-while loop:\n";
```

```php
$i = 1;
$count = 0;
do {
    if ($i % 2 != 0) {
        echo $i . " ";
        $count++;
    }
    $i++;
} while ($count < $n);
?>
```

4. WAP to print Fibonacci series up to n number.

```php
<?php
function fibonacciSeries($n) {
    $fibonacci = array();
    if ($n >= 1) {
        $fibonacci[] = 0;
    }
    if ($n >= 2) {
        $fibonacci[] = 1;
    }
    for ($i = 2; $i < $n; $i++) {
        $next = $fibonacci[$i - 1] + $fibonacci[$i - 2];
        if ($next <= $n) {
            $fibonacci[] = $next;
        } else {
            break;   }
    }
    return $fibonacci;   }
$n = 10;
$fibonacciSeries = fibonacciSeries($n);
echo "Fibonacci series up to the $n number:\n";
echo implode(", ", $fibonacciSeries);
?>
```

Lab: 3

1. WAP to print table of 10 using for loop.

```php
<?php
$number = 10;
echo "Table of $number:\n";
for ($i = 1; $i <= 10; $i++) {
    $result = $number * $i;
    echo "$number x $i = $result\n";
}
?>
```

2. WAP to print following patterns:

```
*                    *           1              1
* *                * *           2 3            2 2
* * *            * * *           4 5 6          3 3 3
* * * *        * * * *           7 8 9 10       4 4 4 4
* * * * *    * * * * *           11 12 13 14    5 5 5 5 5
(a)              (b)             (c)            (d)
```

(a)
```php
<?php
$rows = 5;
for ($i = 1; $i <= $rows; $i++) {
    for ($j = 1; $j <= $i; $j++) {
        echo '* ';   }
    echo "\n";   }
?>
```

(b)
```php
<?php
$rows = 5;
for ($i = 1; $i <= $rows; $i++) {
    for ($j = 1; $j <= $rows - $i; $j++) {
        echo ' ';   }
    for ($k = 1; $k <= 2 * $i - 1; $k++) {
        echo '*';   }
    echo "\n";   }
?>
```

(c)
```php
<?php
```

```php
$k=1;
for ($i = 0; $i < 4; $i++) {
for ($j = 0; $j <= $i; $j++) {
echo $k." ";
$k++;
}
echo "<br>";
}
?>
```

(d)
```php
<?php
for($i = 1;  $i <= 5; $i++)  {
for($j = 1; $j <= $i; $j++)  {
echo $i;
}
echo "<br>";
}
?>
```

3. WAP to print the elements of an array using foreach loop.

```php
<?php
$myArray = array("apple", "banana", "cherry", "date", "fig");
foreach ($myArray as $element) {
   echo $element . "\n";
}
?>
```

Lab: 4

1. WAP to create numeric array and print it.

```php
<?php
$numericArray = array(1, 2, 3, 4, 5);
foreach ($numericArray as $element) {
  echo $element . " ";
}
?>
```

2. WAP to create associative array and print it.

```php
<?php
$assocArray = array(
  "name" => "John",
  "age" => 30,
  "city" => "New York"
);
foreach ($assocArray as $key => $value) {
  echo "$key: $value\n";
}
?>
```

3. WAP to create multidimensional array and print it.

```php
<?php
$multidimensionalArray = array(
  array("John", 30, "New York"),
  array("Alice", 25, "Los Angeles"),
  array("Bob", 35, "Chicago")
);
foreach ($multidimensionalArray as $person) {
  foreach ($person as $detail) {
    echo "$detail ";
  }
  echo "\n";
}
?>
```

4. WAP to sort given array in descending order.

```php
<?php
$myArray = array(5, 2, 9, 1, 5, 6);
rsort($myArray);
foreach ($myArray as $element) {
  echo $element . " ";   }   ?>
```

Lab: 5

1. WAP to demonstrate the use of various array function on an array.

```php
<?php
$fruits = array("apple", "banana", "cherry", "date", "fig");
echo "Original array: ";
print_r($fruits);
// 1. Count the number of elements in the array
$count = count($fruits);
echo "\n1. Number of elements in the array: $count";
// 2. Check if an element exists in the array
$searchItem = "banana";
if (in_array($searchItem, $fruits)) {
    echo "\n2. $searchItem exists in the array.";
} else {
    echo "\n2. $searchItem does not exist in the array.";   }
// 3. Add an element to the end of the array
$fruits[] = "grape";
echo "\n3. After adding 'grape': ";
print_r($fruits);
// 4. Remove the last element from the array
$lastFruit = array_pop($fruits);
echo "\n4. Removed last element: $lastFruit\n";
// 5. Sort the array in ascending order
sort($fruits);
echo "5. Sorted in ascending order: ";
print_r($fruits);
// 6. Reverse the order of elements in the array
$reversedArray = array_reverse($fruits);
echo "6. Reversed order: ";
print_r($reversedArray);
// 7. Find the index of an element in the array
$searchItemIndex = array_search("cherry", $fruits);
echo "7. Index of 'cherry' is: $searchItemIndex\n";
// 8. Slice a portion of the array
$slicedArray = array_slice($fruits, 1, 3);
echo "8. Sliced array from index 1 to 3: ";
print_r($slicedArray);
// 9. Check if all elements meet a condition
$allAreStrings = allAreStrings($fruits);
if ($allAreStrings) {
    echo "9. All elements are strings.\n";
```

```php
} else {
    echo "9. Not all elements are strings.\n";    }
// Custom function to check if all elements in an array are strings
function allAreStrings($array) {
    foreach ($array as $element) {
        if (!is_string($element)) {
            return false;    }    }
    return true;    }   ?>
```

2. WAP to create user define function for print your name (without argument) and call it.

```php
<?php
function printName() {
    echo "Your Name";
}
printName();
?>
```

3. WAP to create user define function for print name (with argument) and call it 5 times with different names as an argument.

```php
<?php
function printName($name) {
    echo "Hello, $name!\n";
}
printName("Alice");
printName("Bob");
printName("Charlie");
printName("David");
printName("Eve");
?>
```

4. WAP to create user define function for adding two numbers and return answer and use it to find addition of two numbers and print answer.

```php
<?php
function addNumbers($num1, $num2) {
    $sum = $num1 + $num2;
    return $sum;
}
$number1 = 5;
$number2 = 7;
$result = addNumbers($number1, $number2);
echo "The sum of $number1 and $number2 is: $result"; ?>
```

5. WAP to print all Armstrong number between two given numbers.

```php
<?php
function isArmstrong($number) {
   $originalNumber = $number;
   $numDigits = strlen((string)$number);
   $sum = 0;
  while ($number > 0) {
      $digit = $number % 10;
      $sum += pow($digit, $numDigits);
      $number = (int)($number / 10);
   }
   return $sum === $originalNumber;
}
function printArmstrongNumbers($start, $end) {
   for ($i = $start; $i <= $end; $i++) {
     if (isArmstrong($i)) {
        echo $i . " ";
     }
   }
}
$start = 1;
$end = 1000;
echo "Armstrong numbers between $start and $end are: ";
printArmstrongNumbers($start, $end);
?>
```

Lab: 6

1. WAP to calculate sum of first n numbers using recursion.

```php
<?php
function sumOfFirstN($n) {
  if ($n <= 0) {
    return 0;
  } else {
    return $n + sumOfFirstN($n - 1);
  }
}
$n = 5;
$sum = sumOfFirstN($n);
echo "The sum of the first $n numbers is: $sum";
?>
```

2. WAP to calculate factorial of a number using recursion.

```php
<?php
function factorial($n) {
  if ($n == 0) {
    return 1;
  } else {
    return $n * factorial($n - 1);
  }
}
$number = 5;
$result = factorial($number);
echo "The factorial of $number is: $result";
?>
```

3. Demonstrate the use of PHP in webpage design for partition of page into different section like header, footer, sidebar, main content, etc.

step:-1 Create a directory structure:
- mywebsite/
  - index.php
  - header.php
  - sidebar.php
  - maincontent.php
  - footer.php

step:-2 Define the content for each section:

header.php
```
<!DOCTYPE html>
<html>
<head>
   <title>My Website</title>
</head>
<body>
   <header>
      <h1>Welcome to My Website</h1>
   </header>
```

sidebar.php
```
<aside>
   <h2>Sidebar</h2>
   <!-- Sidebar content goes here -->
</aside>
```

maincontent.php
```
<main>
   <h2>Main Content</h2>
   <!-- Main content goes here -->
</main>
```

footer.php
```
<footer>
   <p>&copy; <?php echo date("Y"); ?> My Website</p>
</footer>
</body>
</html>
```

step:-3 Create the main webpage (index.php)
```
<?php include('header.php'); ?>
<?php include('sidebar.php'); ?>
<?php include('maincontent.php'); ?>
<?php include('footer.php'); ?>
```

step:-4 Access the webpage
When you access the index.php file in your web browser, it will display the webpage with the header, sidebar, main content, and footer sections assembled from their respective PHP files.

4. Design static website for a college use PHP to reuse code of navigation bar and footer in each page.

step:-1 Directory Structure

- college_website/
  - index.php
  - about.php
  - courses.php
  - contact.php
  - includes/
    - header.php
    - navigation.php
    - footer.php

step:-2 Header (includes/header.php)

```
<!DOCTYPE html>
<html>
<head>
  <meta charset="UTF-8">
  <title>College Website</title>
  <!-- Add CSS links, meta tags, etc. -->
</head>
<body>
```

step:-3 Navigation (includes/navigation.php)

```
<nav>
  <ul>
    <li><a href="index.php">Home</a></li>
    <li><a href="about.php">About</a></li>
    <li><a href="courses.php">Courses</a></li>
    <li><a href="contact.php">Contact</a></li>
  </ul>
</nav>
```

step:-4 Footer (includes/footer.php)

```
<footer>
  <p>&copy; <?php echo date("Y"); ?> College Name</p>
</footer>
</body>
</html>
```

step:-5 Individual Pages

```
<?php include('includes/header.php'); ?>
<?php include('includes/navigation.php'); ?>
```

```
    <!-- Page-specific content goes here -->
<?php include('includes/footer.php'); ?>
```

step:- 6 Styling and Content
Style your website using CSS and add content to each page as needed.

step:- 7 Accessing Pages
Access the individual pages through your web server
(e.g.,http://localhost/college_website/index.php) to view the static website with common
navigation and footer.

Lab: 7

1. Design a student registration form and retrieve data in controller page using following Method: GET, POST, and REQUEST.

step:-1 Create the HTML Form (registration_form.php)

```
<!DOCTYPE html>
<html>
<head>
  <title>Student Registration Form</title>
  <link rel="stylesheet" type="text/css" href="style.css">
</head>
<body>
  <div class="container">
    <h1>Student Registration Form</h1>
    <form action="controller.php" method="GET">
      <div class="form-group">
        <label for="name">Name:</label>
        <input type="text" name="name" id="name" required>
      </div>

      <div class="form-group">
        <label for="email">Email:</label>
        <input type="email" name="email" id="email" required>
      </div>

      <div class="form-group">
        <label for="course">Course:</label>
        <input type="text" name="course" id="course" required>
      </div>

      <div class="form-group">
        <input type="submit" value="Submit">
      </div>
    </form>
  </div>
</body>
</html>
```

step:-2 Create the CSS File (style.css)

```
body {
  font-family: Arial, sans-serif;
  background-color: #f2f2f2;
```

```css
}
.container {
    max-width: 400px;
    margin: 0 auto;
    padding: 20px;
    background-color: #fff;
    border-radius: 5px;
    box-shadow: 0px 0px 10px rgba(0, 0, 0, 0.1);
}
h1 {
    text-align: center;
}
.form-group {
    margin-bottom: 15px;
}
label {
    display: block;
    font-weight: bold;
}
input[type="text"],
input[type="email"] {
    width: 100%;
    padding: 10px;
    border: 1px solid #ccc;
    border-radius: 4px;
}
input[type="submit"] {
    background-color: #4CAF50;
    color: white;
    padding: 10px 15px;
    border: none;
    border-radius: 4px;
    cursor: pointer;
}
input[type="submit"]:hover {
    background-color: #45a049;
}
```

step:-3 Create the Controller Page (controller.php)
```html
<!DOCTYPE html>
<html>
<head>
```

```
  <title>Registration Data</title>
  <link rel="stylesheet" type="text/css" href="style.css">
</head>
<body>
  <div class="container">
    <h1>Registration Data</h1>
    <?php
    if ($_SERVER['REQUEST_METHOD'] === 'GET' || $_SERVER['REQUEST_METHOD'] === 'POST') {
      $name = $_REQUEST['name'];
      $email = $_REQUEST['email'];
      $course = $_REQUEST['course'];

      echo "<div class='form-group'>";
      echo "<label>Name:</label>";
      echo "<span>$name</span>";
      echo "</div>";

      echo "<div class='form-group'>";
      echo "<label>Email:</label>";
      echo "<span>$email</span>";
      echo "</div>";

      echo "<div class='form-group'>";
      echo "<label>Course:</label>";
      echo "<span>$course</span>";
      echo "</div>";
    } else {
      echo "Invalid request method.";
    }
    ?>
  </div>
</body>
</html>
```

step:-4 Access the Registration Form
Start a web server or use an online PHP development environment. Access the registration form by navigating
to registration_form.php in your browser.

step:-5 Submit the Form
Fill in the registration form and submit it. The form data will be processed and displayed on the controller.php
page with CSS styling applied.

2. Design a employee registration form and retrieve data in controller page using following Method: GET, POST, and REQUEST.

step:-1 Create the HTML Form (registration_form.php)

```
<!DOCTYPE html>
<html>
<head>
  <title>Employee Registration Form</title>
  <link rel="stylesheet" type="text/css" href="style.css">
</head>
<body>
  <div class="container">
    <h1>Employee Registration Form</h1>
    <form action="controller.php" method="POST">
      <div class="form-group">
        <label for="name">Name:</label>
        <input type="text" name="name" id="name" required>
      </div>

      <div class="form-group">
        <label for="email">Email:</label>
        <input type="email" name="email" id="email" required>
      </div>

      <div class="form-group">
        <label for="department">Department:</label>
        <input type="text" name="department" id="department" required>
      </div>

      <div class="form-group">
        <input type="submit" value="Submit">
      </div>
    </form>
  </div>
</body>
</html>
```

step:-2 Create the CSS File (style.css)

```
body {
  font-family: Arial, sans-serif;
  background-color: #f2f2f2;
}
```

```css
.container {
    max-width: 400px;
    margin: 0 auto;
    padding: 20px;
    background-color: #fff;
    border-radius: 5px;
    box-shadow: 0px 0px 10px rgba(0, 0, 0, 0.1);
}
h1 {
    text-align: center;
}
.form-group {
    margin-bottom: 15px;
}
label {
    display: block;
    font-weight: bold;
}
input[type="text"],
input[type="email"] {
    width: 100%;
    padding: 10px;
    border: 1px solid #ccc;
    border-radius: 4px;
}
input[type="submit"] {
    background-color: #4CAF50;
    color: white;
    padding: 10px 15px;
    border: none;
    border-radius: 4px;
    cursor: pointer;
}
input[type="submit"]:hover {
    background-color: #45a049;
}
```

step:-3 Create the Controller Page (controller.php)

```html
<!DOCTYPE html>
<html>
<head>
    <title>Registration Data</title>
```

```php
    <link rel="stylesheet" type="text/css" href="style.css">
</head>
<body>
  <div class="container">
    <h1>Registration Data</h1>

    <?php
    if ($_SERVER['REQUEST_METHOD'] === 'POST') {
      $name = $_POST['name'];
      $email = $_POST['email'];
      $department = $_POST['department'];

      echo "<div class='form-group'>";
      echo "<label>Name:</label>";
      echo "<span>$name</span>";
      echo "</div>";

      echo "<div class='form-group'>";
      echo "<label>Email:</label>";
      echo "<span>$email</span>";
      echo "</div>";

      echo "<div class='form-group'>";
      echo "<label>Department:</label>";
      echo "<span>$department</span>";
      echo "</div>";
    } else {
      echo "Invalid request method.";
    }
    ?>
  </div>
</body>
</html>
```

step:-4 Access the Registration Form
Start a web server or use an online PHP development environment. Access the registration form by navigating
to registration_form.php in your browser.

step:-5 Submit the Form
Fill in the registration form and submit it. The form data will be processed and displayed on the controller.php
page with CSS styling applied.

Lab: 8

1. Implement server side validation on student registration form using PHP.

step:-1 Home.php

```html
<!DOCTYPE html>
<html>
<head>
  <title>Student Registration Form</title>
  <link rel="stylesheet" type="text/css" href="styles.css">
</head>
<body>
  <div class="container">
    <h2>Student Registration</h2>
    <form method="POST" action="valiidation.php">
    <div class="form-group">
        <label for="class">Class:</label>
        <input type="text" name="class" id="class" required>
      </div>
      <div class="form-group">
        <label for="sem">Semester:</label>
        <input type="text" name="sem" id="sem" required>
      </div>
      <div class="form-group">
        <label for="name">Name:</label>
        <input type="text" name="name" id="name" required>
      </div>
      <div class="form-group">
        <label for="email">Email:</label>
        <input type="email" name="email" id="email" required>
      </div>
      <div class="form-group">
        <label for="phone">Phone Number:</label>
        <input type="tel" name="phone" id="phone" required>
      </div>
      <div class="form-group">
        <label for="password">Password:</label>
        <input type="password" name="password" id="password" required>
      </div>

      <input type="submit" value="Register" name="submit">
    </form>
```

```
    <!-- Display error messages here -->
    <?php if(isset($_GET['error'])) { ?>
       <p class="error"><?php echo $_GET['error']; ?></p>
    <?php } ?>
  </div>
</body>
</html>
```

step:-2 Style.css
```css
body {
   font-family: Arial, sans-serif;
}

.container {
   max-width: 400px;
   margin: 0 auto;
   padding: 20px;
   border: 1px solid #ccc;
   border-radius: 5px;
   background-color: #f9f9f9;
}

h2 {
   text-align: center;
}

.form-group {
   margin-bottom: 15px;
}

label {
   display: block;
   margin-bottom: 5px;
}

input[type="text"],
input[type="email"],
input[type="tel"],
input[type="password"] {
   width: 100%;
   padding: 10px;
```

```css
    border: 1px solid #ccc;
    border-radius: 5px;
    font-size: 16px;
}

button {
    background-color: #007bff;
    color: #fff;
    padding: 10px 20px;
    border: none;
    border-radius: 5px;
    cursor: pointer;
    font-size: 16px;
}

button:hover {
    background-color: #0056b3;
}
```

step:-3 success.php
```php
<!DOCTYPE html>
<html>
<head>
    <title>Registration Successful</title>
</head>
<body>
    <h2>Registration Successful</h2>
    <p>Thank you for registering as a student.</p>
</body>
</html>
```

step:-4 validation.php
```php
<?php
if (isset($_POST["submit"])) {
    // Retrieve form data
    $class = $_POST["class"];
    $sem = $_POST["sem"];
    $name = $_POST["name"];
    $email = $_POST["email"];
    $phone = $_POST["phone"];
    $password = $_POST["password"];

    // Validate data
```

```php
    $errors = [];

    // Add your validation logic here
    if (empty($name)) {
        $errors[] = "Name is required.";
    } elseif (!preg_match("/^[a-zA-Z\s]+$/", $name)) {
        $errors[] = "Name can only contain letters and spaces.";
    }
    if (strlen($password) < 8) {
        $errors[] = "Password must be at least 8 characters long.";
    }

    // If there are validation errors, display them
    if (!empty($errors)) {
        foreach ($errors as $error) {
            echo "<p class='error'>$error</p>";
        }
    } else {
        // If validation passes, you can insert the data into a database or perform other actions here
        // For this example, we'll just display a success message
        header("Location: success.php");
        exit();
    }
}
?>
```

2. Implement server side validation on employee registration form using PHP.

step:-1 registration_form.php
```html
<!DOCTYPE html>
<html>
<head>
    <title>Employee Registration Form</title>
    <link rel="stylesheet" type="text/css" href="styles.css">
</head>
<body>
    <div class="container">
        <h2>Employee Registration</h2>
        <form method="POST" action="process_registration.php">
            <label for="name">Full Name:</label>
            <input type="text" id="name" name="name" required>
            <br>
```

```html
      <label for="email">Email:</label>
      <input type="email" id="email" name="email" required>
      <br>

      <label for="password">Password:</label>
      <input type="password" id="password" name="password" required>
      <br>

      <label for="confirm_password">Confirm Password:</label>
      <input type="password" id="confirm_password" name="confirm_password" required>
      <br>

      <input type="submit" value="Register">
    </form>

    <!-- Display error messages here -->
    <?php if(isset($_GET['error'])) { ?>
      <p class="error"><?php echo $_GET['error']; ?></p>
    <?php } ?>
  </div>
</body>
</html>
```

step:-2 style.css
```css
.container {
  width: 400px;
  margin: 0 auto;
  padding: 20px;
  border: 1px solid #ccc;
  background-color: #f9f9f9;
  border-radius: 5px;
}

label {
  display: block;
  margin-bottom: 5px;
}

input[type="text"],
input[type="email"],
input[type="password"] {
  width: 100%;
```

```css
    padding: 10px;
    margin-bottom: 10px;
    border: 1px solid #ccc;
    border-radius: 3px;
}

input[type="submit"] {
    background-color: #007bff;
    color: white;
    padding: 10px 15px;
    border: none;
    border-radius: 3px;
    cursor: pointer;
}

.error {
    color: red;
    margin-top: 10px;
}
```

step:-3 process_registration.php

```php
<?php
if ($_SERVER["REQUEST_METHOD"] == "POST") {
    // Validate form data
    $name = $_POST["name"];
    $email = $_POST["email"];
    $password = $_POST["password"];
    $confirm_password = $_POST["confirm_password"];

    // Example validation: Check if passwords match
    if ($password !== $confirm_password) {
        $error = "Passwords do not match.";
        header("Location: registration_form.php?error=" . $error);
        exit();
    }

    // Additional validation logic can be added here
    // For example, you can check if the email is unique or conforms to a specific format

    // If all validation passes, you can proceed with database insertion or other actions
    // For now, we'll just redirect to a success page
    header("Location: registration_success.php");
```

```
    exit();
}
?>
```

step:-4 registration_success.php

```
<!DOCTYPE html>
<html>
<head>
    <title>Registration Successful</title>
</head>
<body>
    <h2>Registration Successful</h2>
    <p>Thank you for registering as an employee.</p>
</body> </html>
```

Lab 9

1. Create a webpage which accepts a file and upload it in specified folder on server.

step:-1 form.php

```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <title>File Upload</title>
   <link rel="stylesheet" href="styles.css">
</head>
<body>
   <div class="container">
     <h2>File Upload</h2>
     <form action="upload.php" method="post" enctype="multipart/form-data">
       <div class="form-group">
         <label for="file">Select a file:</label>
         <input type="file" name="file" id="file" required>
       </div>
       <button type="submit" name="submit">Upload</button>
     </form>
   </div>
</body>
</html>
```

step:-2 style.css

```
body {
   font-family: Arial, sans-serif;
}

.container {
   max-width: 400px;
   margin: 0 auto;
   padding: 20px;
   border: 1px solid #ccc;
   border-radius: 5px;
   background-color: #f9f9f9;
}

h2 {
   text-align: center;
}
```

```css
.form-group {
   margin-bottom: 15px;
}

label {
   display: block;
   margin-bottom: 5px;
}

input[type="file"] {
   width: 100%;
   padding: 10px;
   border: 1px solid #ccc;
   border-radius: 5px;
   font-size: 16px;
}

button {
   background-color: #007bff;
   color: #fff;
   padding: 10px 20px;
   border: none;
   border-radius: 5px;
   cursor: pointer;
   font-size: 16px;
}

button:hover {
   background-color: #0056b3;
}
```

step:-3 upload.php

```php
<?php
if (isset($_POST["submit"])) {

   $uploadDir = "lab-9/1/img"; // Specify the directory where you want to save the uploaded files
   $uploadFile = $uploadDir . $_FILES["file"]["name"];

   // Check if the file already exists
   if (file_exists($uploadFile)) {
      echo "File already exists. Please choose a different file.";
```

```php
        } else {
            // Check file size (you can adjust the maximum file size as needed)
            if ($_FILES["file"]["size"] > 5 * 1024 * 1024) { // 5 MB limit in this example
                echo "File size exceeds the limit. Please choose a smaller file.";
            } else {
                // Upload the file to the specified directory
                if (move_uploaded_file($_FILES["file"]["tmp_name"], $uploadFile)) {
                    echo "File is valid and has been uploaded successfully.";
                } else {
                    echo "Error uploading the file.";
                }
            }
        }
    }
}
?>
```

2. Design a profile page which allow to change profile picture dynamically.

step:-1 profile.php

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Profile Page</title>
    <link rel="stylesheet" href="styles.css">
</head>
<body>
    <div class="container">
        <h2>My Profile</h2>
        <div class="profile-picture">
            <img src=" Image.url" alt="Profile Picture" id="profile-image">
        </div>
        <form action="upload.php" method="post" enctype="multipart/form-data">

            <div class="form-group">
                <label for="file">Select a file:</label>
                <input type="file" name="new_profile_picture" id="ew-profile-picture" required accept="image/*">
            </div>
            <button type="submit" name="submit">Change Profile Picture</button>
        </form>
    </div>
</body>
</html>
```

step:-2 style.css

```css
/* Reset default margin and padding */
* {
    margin: 0;
    padding: 0;
}

body {
    font-family: Arial, sans-serif;
    background-color: #f0f0f0;
}

.container {
    max-width: 400px;
    margin: 0 auto;
    padding: 20px;
    background-color: #fff;
    border: 1px solid #ccc;
    border-radius: 5px;
    box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
    text-align: center;
}

h2 {
    font-size: 24px;
    margin-bottom: 20px;
    color: #333;
}

.profile-picture {
    margin-bottom: 20px;
}

img#profile-image {
    width: 150px;
    height: 150px;
    border-radius: 50%;
    object-fit: cover;
    border: 2px solid #007bff;
}

.form-group {
```

```css
    margin-bottom: 15px;
}

label {
    display: block;
    margin-bottom: 5px;
    color: #333;
}

input[type="file"] {
    width: 100%;
    padding: 10px;
    border: 1px solid #ccc;
    border-radius: 5px;
    font-size: 16px;
}

button {
    background-color: #007bff;
    color: #fff;
    padding: 10px 20px;
    border: none;
    border-radius: 5px;
    cursor: pointer;
    font-size: 16px;
    transition: background-color 0.3s ease;
}

button:hover {
    background-color: #0056b3;
}
```

step:-3 upload.php
```php
<?php
if (isset($_POST["submit"])) {
    $uploadDir = "lab-9/2/img"; // Specify the directory where you want to save the uploaded profile pictures
    $newProfilePicture = $_FILES["new_profile_picture"];

    // Check if a file was uploaded
    if ($newProfilePicture["error"] === UPLOAD_ERR_OK) {
        $uploadFile = $uploadDir . basename($newProfilePicture["name"]);
```

```php
            // Check if the uploaded file is an image
            $imageFileType = strtolower(pathinfo($uploadFile, PATHINFO_EXTENSION));
            if (in_array($imageFileType, ["jpg", "jpeg", "png", "gif"])) {
                // Move the uploaded file to the specified directory
                if (move_uploaded_file($newProfilePicture["tmp_name"], $uploadFile)) {
                    // Update the profile picture path in your database or storage
                    // For this example, we'll just display the new image
                    echo "<div class='container'>
                        <h2>My Profile</h2>
                        <div class='profile-picture'>
                            <img src='$uploadFile' alt='Profile Picture' id='profile-image'>
                        </div>
                        <p>Profile picture updated successfully.</p>
                    </div>";
                } else {
                    echo "Error uploading the file.";
                }
            } else {
                echo "Invalid file format. Please upload a valid image.";
            }
        } else {
            echo "Error uploading the file.";
        }
    }
?>
```

Lab 10

1. Create static login application using session in PHP.

step:-1 login.php

```php
<?php
session_start();

// Static user credentials for demonstration purposes
$validUsername = "student";
$validPassword = "student";

if (isset($_SESSION["username"])) {
  header("Location: welcome.php");
  exit();
}

if (isset($_POST["login"])) {
  $username = $_POST["username"];
  $password = $_POST["password"];

  // Replace with your actual username and password validation logic
  if ($username === $validUsername && $password === $validPassword) {
    $_SESSION["username"] = $username;
    header("Location:welcome.php");
    exit();
  } else {
    $error = "Invalid username or password.";
  }
}
?>

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Login</title>
  <link rel="stylesheet" href="styles.css">
</head>
<body>
  <div class="container">
    <h2>Login</h2>
```

```html
<form action="" method="post">
    <div class="form-group">
        <label for="username">Username:</label>
        <input type="text" name="username" id="username" required>
    </div>
    <div class="form-group">
        <label for="password">Password:</label>
        <input type="password" name="password" id="password" required>
    </div>
    <?php if (isset($error)) : ?>
        <p class="error"><?php echo $error; ?></p>
    <?php endif; ?>
    <button type="submit" name="login">Login</button>
</form>
    </div>
</body>
</html>
```

step:-2 style.css
```css
body {
    font-family: Arial, sans-serif;
    background-color: #f0f0f0;
}

.container {
    max-width: 400px;
    margin: 0 auto;
    padding: 20px;
    background-color: #fff;
    border: 1px solid #ccc;
    border-radius: 5px;
    box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
    text-align: center;
}

h2 {
    font-size: 24px;
    margin-bottom: 20px;
    color: #333;
}

.form-group {
```

```
    margin-bottom: 15px;
}

label {
    display: block;
    margin-bottom: 5px;
    color: #333;
}

input[type="text"],
input[type="password"] {
    width: 100%;
    padding: 10px;
    border: 1px solid #ccc;
    border-radius: 5px;
    font-size: 16px;
}

button {
    background-color: #007bff;
    color: #fff;
    padding: 10px 20px;
    border: none;
    border-radius: 5px;
    cursor: pointer;
    font-size: 16px;
    transition: background-color 0.3s ease;
}

button:hover {
    background-color: #0056b3;
}

.error {
    color: #ff0000;
    margin-top: 10px;
}
```

step:-3 welcome.php
```
<!DOCTYPE html>
<html>
<head>
```

```html
<meta charset="UTF-8">
<title>Welcome</title>
<link rel="stylesheet" href="styles.css">
</head>
<body>
  <div class="welcome-container">
    <h2>Welcome, <?php echo $_SESSION["username"]; ?></h2>
    <p>This is your private page.</p>
    <a href="logout.php">Logout</a>
  </div>
</body>
</html>
```

step:-4 logout.php

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

2. Create static login application using cookie in PHP.

step:-1 login.php

```php
<?php
if (isset($_COOKIE["username"])) {
  header("Location: welcome.php");
  exit();
}

// Static user credentials for demonstration purposes
$demousername ="student";
$demouserpass="student";

if (isset($_POST["login"])) {
  $username = $_POST["username"];
  $password = $_POST["password"];

  // Replace with your actual username and password validation logic
  if ($username === $demousername && $password === $demouserpass) {
    setcookie("username", $username, time() + 3600); // Set a cookie for 1 hour
    header("Location: welcome.php");
    exit();
```

```
    } else {
        $error = "Invalid username or password.";
    }
}
?>
```

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Login</title>
    <link rel="stylesheet" href="styles.css">
</head>
<body>
    <div class="container">
        <h2>Login</h2>
        <form action="" method="post">
            <div class="form-group">
                <label for="username">Username:</label>
                <input type="text" name="username" id="username" required>
            </div>
            <div class="form-group">
                <label for="password">Password:</label>
                <input type="password" name="password" id="password" required>
            </div>
            <?php if (isset($error)) : ?>
                <p class="error"><?php echo $error; ?></p>
            <?php endif; ?>
            <button type="submit" name="login">Login</button>
        </form>
    </div>
</body>
</html>
```

step:-2 style.css
```css
body {
    font-family: Arial, sans-serif;
    background-color: #f0f0f0;
}

.container {
    max-width: 400px;
```

```css
    margin: 0 auto;
    padding: 20px;
    background-color: #fff;
    border: 1px solid #ccc;
    border-radius: 5px;
    box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
    text-align: center;
}

h2 {
    font-size: 24px;
    margin-bottom: 20px;
    color: #333;
}

.form-group {
    margin-bottom: 15px;
}

label {
    display: block;
    margin-bottom: 5px;
    color: #333;
}

input[type="text"],
input[type="password"] {
    width: 100%;
    padding: 10px;
    border: 1px solid #ccc;
    border-radius: 5px;
    font-size: 16px;
}

button {
    background-color: #007bff;
    color: #fff;
    padding: 10px 20px;
    border: none;
    border-radius: 5px;
    cursor: pointer;
    font-size: 16px;
```

```css
    transition: background-color 0.3s ease;
}

button:hover {
    background-color: #0056b3;
}

.error {
    color: #ff0000;
    margin-top: 10px;
}
```

step:-3 welcome.php
```php
<?php
if (!isset($_COOKIE["username"])) {
    header("Location: login.php");
    exit();
}

$username = $_COOKIE["username"];
?>

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Welcome</title>
    <link rel="stylesheet" href="styles.css">
</head>
<body>
    <div class="container">
        <h2>Welcome, <?php echo $username; ?>!</h2>
        <p>This is the protected content. You are logged in.</p>
        <a href="logout.php">Logout</a>
    </div>
</body>
</html>
```

step:-4 logout.php
```php
<?php
setcookie("username", "", time() - 3600); // Expire the cookie by setting its expiration time in the past
header("Location: login.php");
exit(); ?>
```

Lab: 11

1. **Implement Insert and Delete database operation on students table from webpage using PHP.**

classes/DbConfig.php

```php
<?php

    class DbConfig
    {
            private $host="localhost";
            private $username="root";
            private $password="";
            private $dbName="student_info";
            public $con="";

            function __construct()
            {
                    try{
                            $this->con = mysqli_connect(
                                    $this->host,
                                    $this->username,
                                    $this->password,
                                    $this->dbName,
                            ) or die("Some Error Occured,Message:".mysqli_connect_error());
                    }
                    catch(Exception $e){
                            echo "Exception occurs,Message:".$e->message;
                    }
            }
    }
?>
```

classes/student.php

```php
<?php
    include_once "DbConfig.php";

    class student extends DbConfig
    {

            function getAllStudents()
            {
                    $sql="SELECT * FROM student;";
```

```php
            $res=mysqli_query($this->con,$sql);
            $resArray=array();
            while($row=mysqli_fetch_assoc($res)){
                    $resArray[]=$row;
            }
            return $resArray;
        }

        function insertStudent($input){
            extract($input);
            $sql="INSERT INTO `student`(`Id`, `Name`, `Enrollment No.`, `Semester`, `Course`)
            VALUES (NULL,'$name','$enrollment',semester,'$course')";
            $res=mysqli_query($this->con,$sql);
            $resMsg="Inserted Successfully";
            return $resMsg;
        }

        function deleteStudentById($id){
            $sql="DELETE FROM student WHERE id=$id;";
            $res=mysqli_query($this->con,$sql);
            $resMsg="Deleted Successfully";
            return $resMsg;
        }
    }
?>
```

studentRegistration.php
```html
<!DOCTYPE html>
<html>
<head>
    <title>Student Registration Form</title>
</head>
<body>
    <form action="con_studentRegistartion.php"
        method="POST">
        <table>
            <tr>
                <td>Name</td>
                <td>:</td>
                <td><input type="text" name="name"></td>
            </tr>
            <tr>
```

```html
                    <td>Enrollment No.</td>
                    <td>:</td>
                    <td><input type="text" name="enrollment"></td>
                </tr>
                <tr>
                    <td>Semester</td>
                    <td>:</td>
                    <td>
                        <select name="semester">
                            <?php
                                for($i=1;$i<9;$i++){
                                    echo "<option>".$i."</option>";
                                }
                            ?>
                        </select>
                    </td>
                </tr>
                <tr>
                    <td>Course</td>
                    <td>:</td>
                    <td><input type="text" name="course"></td>
                </tr>
                <tr>
                    <td colspan="3">
                        <input type="submit" name="Save">
                    </td>
                </tr>
            </table>
        </form>
</body>
</html>
```
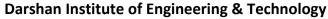
con_studentRegistration.php
```php
<?php
    include_once "./classes/student.php";
    $s=new student();
    $s->insertStudent($_POST);
    header("Location:listStudents.php");
    die();
?>
```

con_deleteStudent.php
```php
<?php
```

```php
        include_once "./classes/student.php";
        $s=new student();
        $deleteMsg=$s->deleteStudentById($_GET['id']);
        header("Location:listStudents.php");
        die();
?>
```

listStudents.php

```php
<!DOCTYPE html>
<html>
<head>
        <title>List of Students</title>
</head>
<body>
        <table border="1">
                <tr>
                        <th>Name</th>
                        <th>Enrollment No.</th>
                        <th>Delete</th>
                </tr>
                <?php
                        include_once "./classes/student.php";
                        $s=new student();
                        $stuArray=$s->getAllStudents();
                        foreach ($stuArray as $key => $value) {
                ?>
                <tr>
                        <td>
                        <?php echo $value['Name']; ?>
                        </td>
                        <td>
                        <?php echo $value['Enrollment No.']; ?>
                        </td>
                        <td>
                                <a onclick="return confirm('Are you sure you want to delete?');"
                                href="con_deleteStudent.php?id= <?php echo $value['Id']; ?>">Delete</a>
                        </td>
                </tr>
                <?php
                        }
                ?>
        </table>
```

```
</body>
</html>
```

2. Implement Insert and Delete database operation on employees table from webpage using PHP.

classes/DbConfig.php

```php
<?php
    class DbConfig
    {
        private $host="localhost";
        private $username="root";
        private $password="";
        private $dbName="employee_info";
        public $con="";

        function __construct()
        {
            try{
                $this->con = mysqli_connect(
                    $this->host,
                    $this->username,
                    $this->password,
                    $this->dbName,
                ) or die("Some Error Occured,Message:".mysqli_connect_error());
            }
            catch(Exception $e){
echo "Exception occurs,Message:".$e->message;
            }
        }
    }
?>
```

classes/employee.php

```php
<?php
    include_once "DbConfig.php";

    class employee extends DbConfig
    {
        function getAllEmployees()
        {
            $sql="SELECT * FROM employee;";
            $res=mysqli_query($this->con,$sql);
```

```php
                $resArray=array();
                while($row=mysqli_fetch_assoc($res)){
                        $resArray[]=$row;
                }
                return $resArray;
        }

        function insertEmployee($input){
                extract($input);
                $sql="INSERT INTO `employee`(`Id`, `Name`, `Department`, `City`, `Phone No.`)
                VALUES (NULL,'$name','$department','$city','$phone')";
                $res=mysqli_query($this->con,$sql);
                $resMsg="Inserted Successfully";
                return $resMsg;
        }

        function deleteEmployeeById($id){
                $sql="DELETE FROM employee WHERE Id=$id;";
                $res=mysqli_query($this->con,$sql);
                $resMsg="Deleted Successfully";
                return $resMsg;
        }
    }
?>
```

employeeRegistration.php
```html
<!DOCTYPE html>
<html>
<head>
        <title>Employee Registration Form</title>
</head>
<body>
        <form action="con_employeeRegistration.php"
                method="POST">
             <table>
                     <tr>
                             <td>Name</td>
                             <td>:</td>
                             <td><input type="text" name="name"></td>
                     </tr>
                     <tr>
                             <td>Department</td>
```

```html
                    <td>:</td>
                    <td><input type="text" name="department"></td>
            </tr>
            <tr>

                    <td>City</td>
                    <td>:</td>
                    <<td><input type="text" name="city"></td>
            </tr>
            <tr>

                    <td>Phone No.</td>
                    <td>:</td>
                    <<td><input type="text" name="phone"></td>
            </tr>
            <tr>

                    <td colspan="3">
                            <input type="submit" name="Save">
                    </td>
            </tr>
        </table>
    </form>
</body>
</html>
```

con_employeeRegistration.php

```php
<?php
        include_once "./classes/employee.php";
        $s=new employee();
        $s->insertEmployee($_POST);
        header("Location:listEmployees.php");
        die();
?>
```

con_deleteEmployee.php

```php
<?php
        include_once "./classes/employee.php";
        $s=new employee();
        $deleteMsg=$s->deleteEmployeeById($_GET['id']);
        header("Location:listEmployees.php");
        die();
?>
```

listEmployees.php

```html
<!DOCTYPE html>
```

```html
<html>
<head>
       <title>List of Employees</title>
</head>
<body>
       <table border="1">
               <tr>
                       <th>Name</th>
                       <th>Department</th>
                       <th>Delete</th>
               </tr>
               <?php
                       include_once "./classes/employee.php";
                       $s=new employee();
                       $stuArray=$s->getAllEmployees();
                       foreach ($stuArray as $key => $value) {
               ?>
               <tr>
                       <td>
                       <?php echo $value['Name']; ?>
                       </td>
                       <td>
                       <?php echo $value['Department']; ?>
                       </td>
                       <td>
<a onclick="return confirm('Are you sure you want to delete?');"
                               href="con_deleteStudent.php?id=
                               <?php echo $value['Id']; ?>">Delete</a>
                       </td>
               </tr>
               <?php
                       }
               ?>
       </table>
</body>
</html>
```

Lab: 12

1. **Implement Select and update database operation on students table and display it on webpage using PHP.**

classes/DbConfig.php

```php
<?php
    class DbConfig
    {
        private $host="localhost";
        private $username="root";
        private $password="";
        private $dbName="student_info";
        public $con="";

        function __construct()
        {
            try{
                $this->con = mysqli_connect(
                    $this->host,
                    $this->username,
                    $this->password,
                    $this->dbName,
                ) or die("Some Error Occured,Message:".mysqli_connect_error());
            }
            catch(Exception $e){
                echo "Exception occurs,Message:".$e->message;
            }
        }
    }
?>
```

classes/student.php

```php
<?php
    include_once "DbConfig.php";

    class student extends DbConfig
    {

        function getStudentById($id){
            $sql="SELECT * FROM student WHERE id=$id;";
            $res=mysqli_query($this->con,$sql);
            $resRow=mysqli_fetch_assoc($res);
```

```php
                return $resRow;
        }

        function updateStudent($input){
                extract($input);
                $sql="UPDATE student SET Name='name', EnrollmentNo.='enrollment',
                Semester='semester', Course='course' WHERE Id='id';";
                $res=mysqli_query($this->con,$sql);
                $resMsg="Update Successfully";
                return $resMsg;
        }
        function getAllStudents()
        {
                $sql="SELECT * FROM student;";
                $res=mysqli_query($this->con,$sql);
                $resArray=array();
                while($row=mysqli_fetch_assoc($res)){
                        $resArray[]=$row;
                }
                return $resArray;

        }
?>
```

studentRegistration.php

```php
<!DOCTYPE html>
<html>
<head>
        <title>Student Registration Form</title>
</head>
<body>
        <form action="con_studentRegistartion.php"
                method="POST">
                <table>
                        <tr>
                                <td>Name</td>
                                <td>:</td>
                                <td><input type="text" name="name"></td>
                        </tr>
                        <tr>
                                <td>Enrollment No.</td>
                                <td>:</td>
```
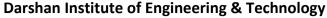
```html
                    <td><input type="text" name="enrollment"></td>
            </tr>
            <tr>
                    <td>Semester</td>
                    <td>:</td>
                    <td>
                            <select name="semester">
                                    <?php
                                            for($i=1;$i<9;$i++){
                                                    echo "<option>".$i."</option>";
                                            }
                                    ?>
                            </select>
                    </td>
            </tr>
            <tr>
                    <td>Course</td>
                    <td>:</td>
                    <td><input type="text" name="course"></td>
            </tr>
            <tr>
                    <td colspan="3">
                            <input type="submit" name="Save">
                    </td>
            </tr>
        </table>
    </form>
</body>
</html>
```

con_studentRegistration.php
```php
<?php
        include_once "./classes/student.php";
        $s=new student();
        $s->insertStudent($_POST);
        header("Location:listStudents.php");
        die();
?>
```

con_editStudent.php
```php
<?php
        include_once "./classes/student.php";
        $s=new student();
```

```php
        $supdateMsg=$s->updateStudent($_POST);
        header("Location:listStudents.php");
        die();
?>
```

listStudent.php

```php
<!DOCTYPE html>
<html>
<head>
        <title>List of Students</title>
</head>
<body>
        <table border="1">
                <tr>
                        <th>Name</th>
                        <th>Enrollment No.</th>
                        <th>Details</th>
                        <th>Edit</th>
                        <th>Delete</th>
                </tr>
                <?php
                include_once "./classes/student.php";
                $s=new student();
                $stuArray=$s->getAllStudents();
                foreach ($stuArray as $key => $value) {
                ?>
                <tr>
                        <td>
                        <?php echo $value['Name']; ?>
                        </td>
                        <td>
                        <?php echo $value['Enrollment No.']; ?>
                        </td>
                        <td>
                                <a href="detailStudent.php?id= <?php echo $value['Id']; ?>">Know
                                more...</a>
                        </td>
                        <td>
                                <a href="con_editStudent.php?id= <?php echo $value['Id']; ?>">Edit</a>
                        </td>
                        <td>
```

```php
                    <a onclick="return confirm('Are you sure you want to delete?');"
                    href="con_deleteStudent.php?id=        <?php echo $value['Id'];
                    ?>">Delete</a>
                </td>
            </tr>
            <?php
                }
            ?>
        </table>
</body>
</html>
```

editStudent.php
```php
<!DOCTYPE html>
<html>
<head>
        <title>Update Student Details</title>
</head>
<body>
        <?php
                include_once "./classes/student.php";
                $s=new student();
                $stuDetail=$s-> getStudentById($_GET['id']);
        ?>

        <form action="con_editStudent.php" method="Post">
                <input type="hidden" name="id" value="<?php echo $stuDetail['Id'];?>">
                <table>
                        <tr>
                                <td>Name</td>
                                <td>:</td>
                                <td>
                                        <input type="text" name="name" value="<?php echo
                                        $stuDetail['Name']?>">
                                </td>
                        </tr>
                        <tr>
                                <td>Enrollment No.</td>
                                <td>:</td>
                                <td>
                                        <input type="text" name="enrollment" value="<?php echo
                                        $stuDetail['Enrollment No.']?>">
```

```
                    </td>
            </tr>
            <tr>
                    <td>Semester</td>
                    <td>:</td>
                    <td><select name="semester">
                            <?php
                                    for($i=1;$i<9;$i++){
                                            if($stuDetail['semester']==$i){
                                                    echo "<option selected>".$i."</option>";
                                            }
                                            else{
                                                    echo "<option>".$i."</option>";
                                            }
                                    }
                            ?>
                            </select>
                    </td>
            </tr>
            <tr>

                    <td>Course</td>
                    <td>:</td>
                    <td>
                            <input type="text" name="course" value="<?php echo
                            $stuDetail['Course']?>">
                    </td>
            </tr>
            <tr>

                    <td colspan="3">
                            <a href="listStudens.php">Cancle</a>
                            <input type="submit" name="Save">
                    </td>
            </tr>
        </table>

    </form>
</body>
</html>
```

detailStudent.php
```
<!DOCTYPE html>
<html>
```

```php
<head>
        <title>Student Detail</title>
</head>
<body>
        <?php
                include_once "./classes/student.php";
                $s=new student();
                $stuDetail=$s->getStudentById($_GET['id']);
        ?>
        <a href="listStudents.php">Back</a>

        <table border="1">
                <tr>
                        <th>Id</th>
                        <td><?php echo $stuDetail['Id'];?></td>
                </tr>
                <tr>
                        <th>Name</th>
                        <td><?php echo $stuDetail['Name'];?></td>
                </tr>
                <tr>
                        <th>Enrollment No.</th>
                        <td><?php echo $stuDetail['Enrollment No.'];?></td>
                </tr>
                <tr>
                        <th>Semester</th>
                        <td><?php echo $stuDetail['Semester'];?></td>
                </tr>
                <tr>
                        <th>Course</th>
                        <td><?php echo $stuDetail['Course'];?></td>
                </tr>
        </table>
</body>
</html>
```

2. **Implement Select and update database operation on employees table and display it on webpage using PHP.**

classes/DbConfig.php
```php
<?php
        class DbConfig
```

```php
    {
            private $host="localhost";
            private $username="root";
            private $password="";
            private $dbName="employee_info";
            public $con="";

            function __construct()
            {
                    try{
                            $this->con = mysqli_connect(
                                    $this->host,
                                    $this->username,
                                    $this->password,
                                    $this->dbName,
                            ) or die("Some Error Occured,Message:".mysqli_connect_error());
                    }
                    catch(Exception $e){
                            echo "Exception occurs,Message:".$e->message;
                    }
            }
    }
?>
```

classes/employee.php
```php
<?php
    include_once "DbConfig.php";

    class employee extends DbConfig
    {

            function getEmployeeById($id){
                    $sql="SELECT * FROM employee WHERE id=$id;";
                    $res=mysqli_query($this->con,$sql);
                    $resRow=mysqli_fetch_assoc($res);
                    return $resRow;
            }

            function updateEmployee($input){
                    extract($input);
                    $sql="UPDATE employee SET Name='name', Department ='department', City='city',
                    Phone No.='phone' WHERE Id='id';";
```

```php
                $res=mysqli_query($this->con,$sql);
                $resMsg="Update Successfully";
                return $resMsg;
        }
        function getAllEmployees()
        {
                $sql="SELECT * FROM employee;";
                $res=mysqli_query($this->con,$sql);
                $resArray=array();
                while($row=mysqli_fetch_assoc($res)){
                        $resArray[]=$row;
                }
                return $resArray;
        }
    }
?>
```

employeeRegistration.php
```html
<!DOCTYPE html>
<html>
<head>
        <title>Employee Registration Form</title>
</head>
<body>
        <form action="con_employeeRegistartion.php"
                method="POST">
                <table>
                        <tr>
                                <td>Name</td>
                                <td>:</td>
                                <td><input type="text" name="name"></td>
                        </tr>
                        <tr>
                                <td>Department</td>
                                <td>:</td>
                                <td><input type="text" name="department"></td>
                        </tr>
                        <tr>
                                <td>City</td>
                                <td>:</td>
                                <td><input type="text" name="city"></td>
                        </tr>
```
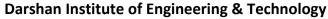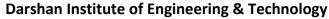
```
                    <tr>
                        <td>Phone No.</td>
                        <td>:</td>
                        <td><input type="text" name="phone"></td>
                    </tr>
                    <tr>
                        <td colspan="3">
                            <input type="submit" name="Save">
                        </td>
                    </tr>
                </table>
        </form>
</body>
</html>
```

con_employeeRegistration.php
```php
<?php
        include_once "./classes/employee.php";
        $s=new employee();
        $s->insertEmployee($_POST);
        header("Location:listEmployees.php");
        die();
?>
```

con_editEmployee.php
```php
<?php
        include_once "./classes/employee.php";
        $s=new employee();
        $supdateMsg=$s->updateEmployee($_POST);
        header("Location:listEmployees.php");
        die();
?>
```

listEmployees.php
```html
<!DOCTYPE html>
<html>
<head>
        <title>List of Employees</title>
</head>
<body>
        <table border="1">
                <tr>
                        <th>Name</th>
```

```php
                    <th>Department</th>
                    <th>Details</th>
                    <th>Edit</th>
                    <th>Delete</th>
            </tr>
            <?php
                    include_once "./classes/employee.php";
                    $s=new Employee();
                    $stuArray=$s->getAllEmployees();
                    foreach ($stuArray as $key => $value) {
            ?>
            <tr>
                    <td>
                            <?php echo $value['Name']; ?>
                    </td>
                    <td>
                            <?php echo $value['Department']; ?>
                    </td>
                    <td>
                            <a href="detailEmployee.php?id= <?php echo $value['Id']; ?>">Know
                            more...</a>
                    </td>
                    <td>
                            <a href="con_editEmployee.php?id= <?php echo $value['Id']; ?>">Edit</a>
                    </td>
                    <td>
                            <a onclick="return confirm('Are you sure you want to delete?');"
                            href="con_deleteEmployee.php?id= <?php echo $value['Id']; ?>">Delete</a>
                    </td>
            </tr>
            <?php
                    }
            ?>
        </table>
</body>
</html>
```
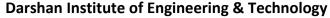
editEmployee.php
```php
<!DOCTYPE html>
<html>
<head>
        <title>Update Employee Details</title>
```

```php
</head>
<body>
        <?php
                include_once "./classes/employee.php";
                $s=new employee();
                $stuDetail=$s-> getEmployeeById($_GET['id']);
        ?>

        <form action="con_editEmployee.php" method="Post">
                <input type="hidden" name="id" value="<?php echo $stuDetail['Id'];?>">
                <table>
                        <tr>
                                <td>Name</td>
                                <td>:</td>
                                <td>
                                        <input type="text" name="name" value="<?php echo
                                        $stuDetail['Name']?>">
                                </td>
                        </tr>
                        <tr>
                                <td>Department</td>
                                <td>:</td>
                                <td>
                                        <input type="text" name="department" value="<?php echo
                                        $stuDetail['Department']?>">
                                </td>
                        </tr>
                        <tr>
                                <td>City</td>
                                <td>:</td>
                                <td>
                                        <input type="text" name="city" value="<?php echo
                                        $stuDetail[City]?>">
                                </td>
                        </tr>
                        <tr>
                                <td>Phone No.</td>
                                <td>:</td>
                                <td>
                                        <input type="text" name="phone" value="<?php echo
                                        $stuDetail[Phone No.]?>">
                                </td>
```
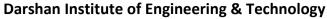
```
                        </tr>
                        <tr>
                                <td colspan="3">
                                        <a href="listEmployees.php">Cancle</a>
                                        <input type="submit" name="Save">
                                </td>
                        </tr>
                </table>

        </form>
</body> </html>
```

detailEmployee.php
```
<!DOCTYPE html>
<html>
<head>
        <title>Employee Detail</title>
</head>
<body>
        <?php
                include_once "./classes/employee.php";
                $s=new employee();
                $stuDetail=$s->getEmployeeById($_GET['id']);
        ?>
        <a href="listEmployees.php">Back</a>

        <table border="1">
                <tr>
                        <th>Id</th>
                        <td><?php echo $stuDetail['Id'];?></td>
                </tr>
                <tr>
                        <th>Name</th>
                        <td><?php echo $stuDetail['Name'];?></td>
                </tr>
                <tr>
                        <th>Department</th>
                        <td><?php echo $stuDetail['Department'];?></td>
                </tr>
                <tr>
                        <th>City</th>
                        <td><?php echo $stuDetail['City'];?></td>
```

```
                </tr>
                <tr>
                        <th>Phone No.</th>
                        <td><?php echo $stuDetail['Phone No.'];?></td>
                </tr>
        </table>
</body>
</html>
```

Lab: 13

1. **Implement complete login application using PHP, also use cookie to provide remember me functionality.**

index.html
```html
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Login</title>
</head>
<body>
    <h2>Login</h2>
    <form action="login.php" method="post">
      <input type="text" name="username" placeholder="Username" required>
      <input type="password" name="password" placeholder="Password" required>
      <label for="remember_me">Remember Me</label>
      <input type="checkbox" name="remember_me" id="remember_me">
      <input type="submit" value="Login">
    </form>
  </div>
</body>
</html>
```
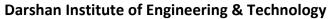
login.php
```php
<?php
session_start();

if ($_SERVER["REQUEST_METHOD"] == "POST") {
  $username = $_POST["username"];
  $password = $_POST["password"];
  $remember_me = isset($_POST["remember_me"]) ? true : false;
$conn = new mysqli("localhost", "username", "password", "loginapp");

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

$stmt = $conn->prepare("SELECT * FROM users WHERE username = ?");
  $stmt->bind_param("s", $username);
  $stmt->execute();
  $result = $stmt->get_result();
```

```php
    if ($result->num_rows === 1) {
      $row = $result->fetch_assoc();

      if (password_verify($password, $row["password"])) {
        $_SESSION["username"] = $username;

        if ($remember_me) {
                $remember_token = bin2hex(random_bytes(32));
setcookie("remember_me", $remember_token, time() + (30 * 24 * 60 * 60));
$stmt = $conn->prepare("UPDATE users SET remember_token = ? WHERE username = ?");
                $stmt->bind_param("ss", $remember_token, $username);
                $stmt->execute();
        }
        header("Location: welcome.php");  page
      }

else {
      echo "Invalid password.";
    }
  }
else {
    echo "User not found.";
  }

  $stmt->close();
  $conn->close();
}
?>
```

welcome.php
```php
<html>
  <title>Welcome</title>
</head>
<body>
    <h2>Welcome, <?php echo $_SESSION["username"]; ?></h2>
    <a href="logout.php">Logout</a>
  </div>
</body>
</html>
```

logout.php
```php
<?php
session_start();
```

```php
session_destroy();
setcookie("remember_me", "", time() - 3600);
header("Location: index.html");
?>
```

Lab: 14

1. Implement CRUD operations on students table using prepared statement in PHP.

DbConfig.php

```php
<?php
    class DbConfig
    {
        private $host="localhost";
        private $username="root";
        private $password="";
        private $dbName="student_info";
        public $con="";

        function __construct()
        {
            try{
                $this->con = mysqli_connect(
                    $this->host,
                    $this->username,
                    $this->password,
                    $this->dbName,
                ) or die("Some Error Occured,Message:".mysqli_connect_error());
            }

            catch(Exception $e){
                echo "Exception occurs,Message:".$e->message;
            }
        }
    }
?>
```

student.php

```php
<?php
    include_once "DbConfig.php";

    class student extends DbConfig
    {
        function getStudentById($id){
            $sql="SELECT * FROM student WHERE id=?;";
            $stGetByIdStu=mysqli_prepare($this->con,$sql);
            mysqli_stmt_bind_param($stGetByIdStu,'i',$id);
```

```php
        mysqli_stmt_execute($stGetByIdStu);
        $res=mysqli_stmt_get_result($stGetByIdStu);
        $resRow=mysqli_fetch_assoc($res);
        return $resRow;
}

function updateStudent($input){
        extract($input);
        $sql="UPDATE student SET Name=?,Enrollment_No=?,Semester=?,Course=? WHERE
Id=?;";
        $stUpStu=mysqli_prepare($this->con,$sql);
        mysqli_stmt_bind_param($stUpStu,'ssisi',$name,$enrollment,$semester,$course,
$id);
        mysqli_stmt_execute($stUpStu);
        $resMsg="Update Successfully";
        return $resMsg;
}

function getAllStudents()
{
        $sql="SELECT * FROM student;";
        $stGetAllStu=mysqli_prepare($this->con,$sql);
        mysqli_stmt_execute($stGetAllStu);
        $res=mysqli_stmt_get_result($stGetAllStu);
        $resArray=array();
        while($row=mysqli_fetch_assoc($res)){
                $resArray[]=$row;
        }
        return $resArray;
}

function insertStudent($input){
        extract($input);
        $sql="INSERT INTO `student`(`Id`, `Name`, `Enrollment_No`, `Semester`, `Course`)
VALUES (NULL,?,?,?,?);";
        $stInsStu=mysqli_prepare($this->con,$sql);
        mysqli_stmt_bind_param($stInsStu,'ssis',$name,$enrollment,$semester,$course);
        mysqli_stmt_execute($stInsStu);
        $resMsg="Inserted Successfully";
        return $resMsg;
}
```

```php
		function deleteStudentById($id){
				$sql="DELETE FROM student WHERE Id=?;";
				$stDelStu=mysqli_prepare($this->con,$sql);
				mysqli_stmt_bind_param($stDelStu,'i',$id);
				mysqli_stmt_execute($stDelStu);
				$resMsg="Deleted Successfully";
				return $resMsg;
		}

	}
?>
```

con_deleteStudent.php
```php
<?php
	include_once "./classes/student.php";
	$s=new student();
	$deleteMsg=$s->deleteStudentById($_GET['id']);
	header("Location:listStudents.php");
	die();
?>
```

con_editStudent.php
```php
<?php
	include_once "./classes/student.php";
	$s=new student();
	$supdateMsg=$s->updateStudent($_POST);
	header("Location:listStudents.php");
	die();
?>
```

con_studentRegistration.php
```php
<?php
	include_once "./classes/student.php";
	$s=new student();
	$s->insertStudent($_POST);
	header("Location:listStudents.php");
	die();
?>
```

detailStudent.php
```php
<!DOCTYPE html>
<html>
<head>
```

```php
		<title>Student Detail</title>
</head>
<body>
	<?php
			include_once "./classes/student.php";
			$s=new student();
			$stuDetail=$s->getStudentById($_GET['id']);
	?>
	<a href="listStudents.php">Back</a>

	<table border="1">
		<tr>
			<th>Id</th>
			<td><?php echo $stuDetail['Id'];?></td>
		</tr>
		<tr>
			<th>Name</th>
			<td><?php echo $stuDetail['Name'];?></td>
		</tr>
		<tr>
			<th>Enrollment No.</th>
			<td><?php echo $stuDetail['Enrollment_No'];?></td>
		</tr>
		<tr>
			<th>Semester</th>
			<td><?php echo $stuDetail['Semester'];?></td>
		</tr>
		<tr>
			<th>Course</th>
			<td><?php echo $stuDetail['Course'];?></td>
		</tr>
	</table>
</body>
</html>
```

editStudent.php
```php
<!DOCTYPE html>
<html>
<head>
	<title>Update Student Details</title>
</head>
<body>
```

```php
<?php
        include_once "./classes/student.php";
        $s=new student();
        $stuDetail=$s-> getStudentById($_GET['id']);
?>


<form action="con_editStudent.php" method="Post">
        <input type="hidden" name="id" value="<?php echo $stuDetail['Id'];?>">
        <table>
                <tr>
                        <td>Name</td>
                        <td>:</td>
                        <td>
                                <input type="text" name="name" value="<?php echo
                                $stuDetail['Name']?>">
                        </td>
                </tr>
                <tr>
                        <td>Enrollment No.</td>
                        <td>:</td>
                        <td>
                                <input type="text" name="enrollment" value="<?php echo
                                $stuDetail['Enrollment_No']?>">
                        </td>
                </tr>
                <tr>
                        <td>Semester</td>
                        <td>:</td>
                        <td>
                                <select name="semester">
                                        <?php
                                        for($i=1;$i<9;$i++){
                                                if($stuDetail['Semester']==$i){
                                                        echo "<option selected>".$i."</option>";
                                                }
                                                else{
                                                        echo "<option>".$i."</option>";
                                                }
                                        }
                                        ?>
                                </select>
                        </td>
```
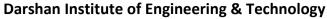
```html
				</tr>
				<tr>
					<td>Course</td>
					<td>:</td>
					<td>
						<input type="text" name="course" value="<?php echo
						$stuDetail['Course']?>">
					</td>
				</tr>
				<tr>
					<td colspan="3">
						<a href="listStudents.php">Cancle</a>
						<input type="submit" name="Save">
					</td>
				</tr>
			</table>

	</form>
</body>
</html>
```

listStudents.php
```php
<!DOCTYPE html>
<html>
<head>
	<title>List of Students</title>
</head>
<body>
	<table border="1">
		<tr>
			<th>Name</th>
			<th>Enrollment No.</th>
			<th>Details</th>
			<th>Edit</th>
			<th>Delete</th>
		</tr>
		<?php
			include_once "./classes/student.php";
			$s=new student();
			$stuArray=$s->getAllStudents();
			foreach ($stuArray as $key => $value) {
		?>
```

```
                <tr>
                        <td>
                        <?php echo $value['Name']; ?>
                        </td>
                        <td>
                        <?php echo $value['Enrollment_No']; ?>
                        </td>
                        <td>
                                <a
                                href="detailStudent.php?id=
                                <?php echo $value['Id']; ?>">Know more...</a>
                        </td>
                        <td>
                                <a
                                href="editStudent.php?id=
                                <?php echo $value['Id']; ?>">Edit</a>
                        </td>
                        <td>
<a onclick="return confirm('Are you sure you want to delete?');"
                                href="con_deleteStudent.php?id=
                                <?php echo $value['Id']; ?>">Delete</a>
                        </td>
                </tr>
                <?php
                        }
                ?>
        </table>
</body>
</html>
```

studentRegistration.php
```
<!DOCTYPE html>
<html>
<head>
        <title>Student Registration Form</title>
</head>
<body>
        <form action="con_studentRegistartion.php"
                method="POST">
                <table>
                        <tr>
                                <td>Name</td>
```

```html
            <td>:</td>
            <td><input type="text" name="name"></td>
        </tr>
        <tr>

            <td>Enrollment No.</td>
            <td>:</td>
            <td><input type="text" name="enrollment"></td>
        </tr>
        <tr>

            <td>Semester</td>
            <td>:</td>
            <td>
                <select name="semester">
                    <?php
                        for($i=1;$i<=8;$i++){
                            echo "<option>".$i."</option>";
                        }
                    ?>
                </select>
            </td>
        </tr>
        <tr>

            <td>Course</td>
            <td>:</td>
            <td><input type="text" name="course">
            </td>
        </tr>
        <tr>

        <td colspan="3">
            <input type="submit" name="Save">
        </td>
        </tr>
    </table>
    </form>
</body>
</html>
```

Lab: 15

1. Implement CRUD operations on students table using stored procedure in PHP.

SP_DeleteStudent

```
DELIMITER $$
CREATE DEFINER=`root`@`localhost` PROCEDURE `SP_DeleteStudent`(IN `id` INT(50))
BEGIN
        DELETE FROM student WHERE id=id;
END$$
DELIMITER ;
```

SP_GetAllStudent

```
DELIMITER $$
CREATE DEFINER=`root`@`localhost` PROCEDURE `SP_GetAllStudent`()
BEGIN
        SELECT * FROM student;
END$$
DELIMITER ;
```

SP_GetStudentById

```
DELIMITER $$
CREATE DEFINER=`root`@`localhost` PROCEDURE `SP_GetStudentById`(IN `id` INT(50))
BEGIN
        SELECT* FROM student WHERE student.id=id;
END$$
DELIMITER ;
```

SP_InsertStudent

```
DELIMITER $$
CREATE DEFINER=`root`@`localhost` PROCEDURE `SP_InsertStudent`(IN `name` VARCHAR(50), IN `enrollment`
VARCHAR(20), IN `semester` INT(20), IN `course` VARCHAR(20))
BEGIN
INSERT INTO student(Name,Enrollment_no,Semester,Course) VALUES(name,enrollment,semester,course);
END$$
DELIMITER ;
```

SP_UpdateStudent

```
DELIMITER $$
CREATE DEFINER=`root`@`localhost` PROCEDURE `SP_UpdateStudent`(IN `id` INT(50), IN `name` VARCHAR(20),
IN `enrollment` VARCHAR(20), IN `semester` INT(20), IN `course` VARCHAR(20))
BEGIN
UPDATE student SET Name=name, Enrollment_no=enrollment, Semester=semester, Course=course WHERE
id=id;
```

```
END$$
DELIMITER;
```

classes/DbConfig.php

```php
<?php

        class DbConfig
        {
                private $host="localhost";
                private $username="root";
                private $password="";
                private $dbName="student_info";
                public $con="";

                function __construct()
                {
                        try{
                                $this->con = mysqli_connect(
                                        $this->host,
                                        $this->username,
                                        $this->password,
                                        $this->dbName,
                                ) or die("Some Error Occured,Message:".mysqli_connect_error());
                        }

                        catch(Exception $e){
                                echo "Exception occurs,Message:".$e->message;
                        }
                }
        }
?>
```

classes/student.php

```php
<?php
        include_once "DbConfig.php";

        class student extends DbConfig
        {

                function getStudentById($id){
$res=mysqli_query($this->con,"call SP_getStudentById('$id')");
                        $resRow=mysqli_fetch_assoc($res);
                        return $resRow;
```

```php
                }

                function updateStudent($input){
                        extract($input);
$res=mysqli_query($this->con,"call SP_UpdateStudent('$name','$enrollment','$semester','$course','$id')");
                        $resMsg="Update Successfully";
                        return $resMsg;
                }
                function getAllStudents()
                {
$res=mysqli_query($this->con,"call SP_GetAllStudent()");
                        $resArray=array();
                        while($row=mysqli_fetch_assoc($res)){
                                $resArray[]=$row;
                        }
                        return $resArray;
                }


                function insertStudent($input){
                        extract($input);
$res=mysqli_query($this->con,"call SP_InsertStudent('$name','$enrollment','$semester','$course')");
                        $resMsg="Inserted Successfully";
                        return $resMsg;
                }


                function deleteStudentById($id){
$res=mysqli_query($this->con,"call SP_DeleteStudent('$id')");
                        $resMsg="Deleted Successfully";
                        return $resMsg;
                }
}
```

con_deleteStudent.php

```php
<?php
        include_once "./classes/student.php";
        $s=new student();
        $deleteMsg=$s->deleteStudentById($_GET['id']);
        header("Location:listStudents.php");
        die();
?>
```

con_editStudent.php

```php
<?php
```

```php
        include_once "./classes/student.php";
        $s=new student();
        $supdateMsg=$s->updateStudent($_POST);
        header("Location:listStudents.php");
        die();
?>
```

con_studentRegistration.php

```php
<?php
        include_once "./classes/student.php";
        $s=new student();
        $s->insertStudent($_POST);
        header("Location:listStudents.php");
        die();
?>
```

detailStudent.php

```php
<!DOCTYPE html>
<html>
<head>
        <title>Student Detail</title>
</head>
<body>
        <?php
                include_once "./classes/student.php";
                $s=new student();
                $stuDetail=$s->getStudentById($_GET['id']);
        ?>
        <a href="listStudents.php">Back</a>

        <table border="1">
                <tr>
                        <th>Id</th>
                        <td><?php echo $stuDetail['Id'];?></td>
                </tr>
                <tr>
                        <th>Name</th>
                        <td><?php echo $stuDetail['Name'];?></td>
                </tr>
                <tr>
                        <th>Enrollment No.</th>
                        <td><?php echo $stuDetail['Enrollment_No'];?></td>
                </tr>
```

```
                <tr>
                        <th>Semester</th>
                        <td><?php echo $stuDetail['Semester'];?></td>
                </tr>
                <tr>
                        <th>Course</th>
                        <td><?php echo $stuDetail['Course'];?></td>
                </tr>
        </table>
</body>
</html>
```

editStudent.php
```php
<!DOCTYPE html>
<html>
<head>
        <title>Update Student Details</title>
</head>
<body>
        <?php
                include_once "./classes/student.php";
                $s=new student();
                $stuDetail=$s-> getStudentById($_GET['id']);
        ?>

        <form action="con_editStudent.php" method="Post">
<input type="hidden" name="id" value="<?php echo $stuDetail['Id'];?>">
                <table>
                        <tr>
                                <td>Name</td>
                                <td>:</td>
                                <td>
<input type="text" name="name" value="<?php echo $stuDetail['Name']?>">
                                </td>
                        </tr>
                        <tr>
                                <td>Enrollment No.</td>
                                <td>:</td>
                                <td>
<input type="text" name="enrollment" value="<?php echo $stuDetail['Enrollment_No']?>">
                                </td>
                        </tr>
```

```
                <tr>
                        <td>Semester</td>
                        <td>:</td>
                        <td>
                                <select name="semester">
                                        <?php
                                                for($i=1;$i<9;$i++){

                                                if($stuDetail['Semester']==$i){
echo "<option selected>".$i."</option>";
                                                        }
                                                        else{
echo "<option>".$i.
"</option>";

                                                        }
                                                }
                                        ?>
                                </select>
                        </td>
                </tr>
                <tr>
                        <td>Course</td>
                        <td>:</td>
                        <td>
<input type="text" name="course" value="<?php echo $stuDetail['Course']?>">
                        </td>
                </tr>
                <tr>
                        <td colspan="3">
                                <a href="listStudents.php">Cancle</a>
                                <input type="submit" name="Save">
                        </td>
                </tr>
        </table>

    </form>
</body>
</html>
```

listStudents.php
```
<!DOCTYPE html>
<html>
```

```php
<head>
        <title>List of Students</title>
</head>
<body>
        <table border="1">
                <tr>
                        <th>Name</th>
                        <th>Enrollment No.</th>
                        <th>Details</th>
                        <th>Edit</th>
                        <th>Delete</th>
                </tr>
                <?php
                        include_once "./classes/student.php";
                        $s=new student();
                        $stuArray=$s->getAllStudents();
                        foreach ($stuArray as $key => $value) {
                ?>
                <tr>
                        <td>
                        <?php echo $value['Name']; ?>
                        </td>
                        <td>
                        <?php echo $value['Enrollment_No']; ?>
                        </td>
                        <td>
                                <a href="detailStudent.php?id= <?php echo $value['Id']; ?>">Know
                                more...</a>
                        </td>
                        <td>
                                <a href="editStudent.php?id= <?php echo $value['Id']; ?>">Edit</a>
                        </td>
                        <td>
                                <a onclick="return confirm('Are you sure you want to delete?');"
                                href="con_deleteStudent.php?id= <?php echo $value['Id']; ?>">Delete</a>
                        </td>
                </tr>
                <?php
                        }
                ?>
        </table>
</body>
```

```html
</html>
```

studentRegistration.php

```php
<!DOCTYPE html>
<html>
<head>
        <title>Student Registration Form</title>
</head>
<body>
        <form action="con_studentRegistartion.php"
                method="POST">
                <table>
                        <tr>
                                <td>Name</td>
                                <td>:</td>
                                <td><input type="text" name="name"></td>
                        </tr>
                        <tr>
                                <td>Enrollment No.</td>
                                <td>:</td>
                                <td><input type="text" name="enrollment"></td>
                        </tr>
                        <tr>
                                <td>Semester</td>
                                <td>:</td>
                                <td>
                                        <select name="semester">
                                                <?php
                                                        for($i=1;$i<=8;$i++){
                                                                echo "<option>".$i."</option>";
                                                        }
                                                ?>
                                        </select>
                                </td>
                        </tr>
                        <tr>
                                <td>Course</td>
                                <td>:</td>
                                <td><input type="text" name="course">
                                </td>
                        </tr>
                        <tr>
```

```
            <td colspan="3">
                    <input type="submit" name="Save">
            </td>
        </tr>
    </table>
</form>
</body>
</html>
```