Lab #5a:
SERVER-SIDE SCRIPTING (PHP)

Topic	Web page development using PHP
Domain of Learning	Psychomotor (P2: Set; P3: Guided Respond; P4: Mechanism)
Learning objective	1. To evaluate the response to solve the problem as required. (P2) 2. To evaluate the skill of how the web page is developed while using the code/tags correctly. (P3) 3. To evaluate the value added of creativity/knowledge/skill in web page development. (P4)
Lab activity objective	To use the combination of HTML tags and PHP scripting adequately based on the suitable requirement of a case study.

Instruction: Answer all questions. Write your answer and screenshot the output in Microsoft Word. Submit through Author in PDF format.

1. **Create a folder named** `lab_5a` in your XAMPP's `htdocs` folder. **Create a PHP file** named `lab5a_q1.php` inside the folder. Copy and paste the code below. Then, **start** your Apache web server. Open your browser and enter `localhost/yourfoldername/yourphpfilename`.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Lab 5a Q1</title>
</head>
<body>
    <?php
        $name = "Nur Ariffin Mohd Zin";
    ?>

    <table>
        <tr>
            <td>Name</td>
            <td><?php echo "$name"; ?></td>
        </tr>
    </table>

</body>
</html>
```

Edit the PHP file to create variables of your details and display them on the HTML table. Your details should be as follows:

(a) Name
(b) Matric number
(c) Course
(d) Year of study
(e) Address

Name	Chua Kai Zen
Matric No	AI220259
Course	BIS
Year of study	3
Address	No. 1, Jalan 2, Taman Aman, 43000 Kajang, Selangor

```php
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Lab 5a Q1</title>
</head>
<body>
    <?php
        $name = "Chua Kai Zen";
        $matricNo = "AI220259";
        $course = "BIS";
        $yearOfStudy = 3;
        $address = "No. 1, Jalan 2, Taman Aman, 43000 Kajang, Selangor";
    ?>

    <table border="">
        <tr>
            <td>Name</td>
            <td><?php echo "$name"; ?></td>
        </tr>
        <tr>
            <td>Matric No</td>
            <td><?php echo "$matricNo"; ?></td>
        </tr>
        <tr>
            <td>Course</td>
            <td><?php echo "$course"; ?></td>
        </tr>
        <tr>
            <td>Year of study</td>
            <td><?php echo "$yearOfStudy"; ?></td>
        </tr>
        <tr>
            <td>Address</td>
            <td><?php echo "$address"; ?></td>
        </tr>
    </table>

</body>
</html>

```

2. Create a new PHP file named `lab5a_q2.php` and write the following associative array:

```php
$students = [
    [
        'name' => 'Alice',
        'program' => 'BIP',
        'age' => 21
    ],
    [
        'name' => 'Bob',
        'program' => 'BIS',
        'age' => 20
    ],
    [
        'name' => 'Raju',
        'program' => 'BIT',
        'age' => 22
    ]
];
```

Use `foreach` loop to display the content of `$students` on an **HTML table as below**.

Name	Program	Age
Alice	BIP	21
Bob	BIS	20
Raju	BIT	22

```php
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Lab 5a Q2</title>
</head>
<body>
    <?php
        $students = [
            [
                'name' => 'Chua Kai Zen',
                'programme' => 'BIS',
                'age' => 21,
            ],
            [
                'name' => 'Quek Sze Yang',
                'programme' => 'BIT',
                'age' => 22,
            ],
            [
                'name' => 'Yong Wei Di',
                'programme' => 'BIS',
                'age' => 23,
            ],
        ]
    ?>

    <table border="">
        <tr>
            <th>Name</th>
            <th>Program</th>
            <th>Age</th>
        </tr>
        <?php
        foreach ($students as $student)
        {
            echo "<tr>";
            echo "<td>" . $student['name'] . "</td>";
            echo "<td>" . $student['programme'] . "</td>";
            echo "<td>" . $student['age'] . "</td>";
            echo "</tr>";
        }
        ?>
    </table>


</body>
</html>
```

Name	Program	Age
Chua Kai Zen	BIS	21
Quek Sze Yang	BIT	22
Yong Wei Di	BIS	23

3. Create a new PHP file named `lab5a_q3.php` and write a PHP function named `calculateArea` to calculate the **area of a rectangle**. The function should **receive two parameters** and **return the area**. Call the function with any value of your choice and display the result. Below is an output sample of the function.

The area of a rectangle with a width of 4 and 2 is 8

> The area of a rectangle with a width of 4 and 2 is 8

```php
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Lab 5a Q3</title>
</head>
<body>
    <?php

    function cal(float $length, float $width): float
    {
        $area = $length * $width;
        return ($area);
    }

    $length = 4;
    $width = 2;
    $area = cal($length, $width);
    echo ("<p>" . "The area of a rectangle with a width of " . $length . " and " . $width . " is " . $area . "</p>");
    ?>
</body>
</html>
```

4. Push all your codes to GitHub and provide the link of your repository in the PDF report (along with your codes and screenshot of the output). You do not need to enable GitHub Pages since it cannot render server-side scripting like PHP.
https://github.com/liftlobby/Lab5a.git