1. **To set file permissions for the Apache web server:**

sudo usermod -a -G apache ec2-user

exit – from root User

groups

sudo chown -R ec2-user:apache /var/www

sudo chmod 2775 /var/www

find /var/www -type d -exec sudo chmod 2775 {} \;

find /var/www -type f -exec sudo chmod 0664 {} \;

**2. Connected Apache web server to DB instance by following commands:**

**A. Created new directory inside var/www as inc**

cd /var/www

mkdir inc

cd inc

**B. created new file as below:**

>dbinfo.inc

vim dbinfo.inc

**Content of dbinfo.inc :**

<?php

define('DB\_SERVER', 'database-1.cmm2ai0pzfii.us-east-1.rds.amazonaws.com');

define('DB\_USERNAME', 'admin123');

define('DB\_PASSWORD', 'admin123');

define('DB\_DATABASE', 'Project1SamplePage');

?>

C. Changed the directory to /var/www/html :

cd /var/www/html

D. Created new file in the html directory named Project1SamplePage.php

>Project1SamplePage.php

vim Project1SamplePage.php

E. Added Script to the Project1SamplePage.php file:

<?php include "../inc/dbinfo.inc"; ?>

<html>

<body>

<h1>Sample page</h1>

<?php

/\* Connect to MySQL and select the database. \*/

$connection = mysqli\_connect(DB\_SERVER, DB\_USERNAME, DB\_PASSWORD);

if (mysqli\_connect\_errno()) echo "Failed to connect to MySQL: " . mysqli\_connect\_error();

$database = mysqli\_select\_db($connection, DB\_DATABASE);

/\* Ensure that the EMPLOYEES table exists. \*/

VerifyEmployeesTable($connection, DB\_DATABASE);

/\* If input fields are populated, add a row to the EMPLOYEES table. \*/

$employee\_name = htmlentities($\_POST['NAME']);

$employee\_address = htmlentities($\_POST['ADDRESS']);

if (strlen($employee\_name) || strlen($employee\_address)) {

AddEmployee($connection, $employee\_name, $employee\_address);

}

?>

<!-- Input form -->

<form action="<?PHP echo $\_SERVER['SCRIPT\_NAME'] ?>" method="POST">

<table border="0">

<tr>

<td>NAME</td>

<td>ADDRESS</td>

</tr>

<tr>

<td>

<input type="text" name="NAME" maxlength="45" size="30" />

</td>

<td>

<input type="text" name="ADDRESS" maxlength="90" size="60" />

</td>

<td>

<input type="submit" value="Add Data" />

</td>

</tr>

</table>

</form>

<!-- Display table data. -->

<table border="1" cellpadding="2" cellspacing="2">

<tr>

<td>ID</td>

<td>NAME</td>

<td>ADDRESS</td>

</tr>

<?php

$result = mysqli\_query($connection, "SELECT \* FROM EMPLOYEES");

while($query\_data = mysqli\_fetch\_row($result)) {

echo "<tr>";

echo "<td>",$query\_data[0], "</td>",

"<td>",$query\_data[1], "</td>",

"<td>",$query\_data[2], "</td>";

echo "</tr>";

}

?>

</table>

<!-- Clean up. -->

<?php

mysqli\_free\_result($result);

mysqli\_close($connection);

?>

</body>

</html>

<?php

/\* Add an employee to the table. \*/

function AddEmployee($connection, $name, $address) {

$n = mysqli\_real\_escape\_string($connection, $name);

$a = mysqli\_real\_escape\_string($connection, $address);

$query = "INSERT INTO EMPLOYEES (NAME, ADDRESS) VALUES ('$n', '$a');";

if(!mysqli\_query($connection, $query)) echo("<p>Error adding employee data.</p>");

}

/\* Check whether the table exists and, if not, create it. \*/

function VerifyEmployeesTable($connection, $dbName) {

if(!TableExists("EMPLOYEES", $connection, $dbName))

{

$query = "CREATE TABLE EMPLOYEES (

ID int(11) UNSIGNED AUTO\_INCREMENT PRIMARY KEY,

NAME VARCHAR(45),

ADDRESS VARCHAR(90)

)";

if(!mysqli\_query($connection, $query)) echo("<p>Error creating table.</p>");

}

}

/\* Check for the existence of a table. \*/

function TableExists($tableName, $connection, $dbName) {

$t = mysqli\_real\_escape\_string($connection, $tableName);

$d = mysqli\_real\_escape\_string($connection, $dbName);

$checktable = mysqli\_query($connection,

"SELECT TABLE\_NAME FROM information\_schema.TABLES WHERE TABLE\_NAME = '$t' AND TABLE\_SCHEMA = '$d'");

if(mysqli\_num\_rows($checktable) > 0) return true;

return false;

}

?>