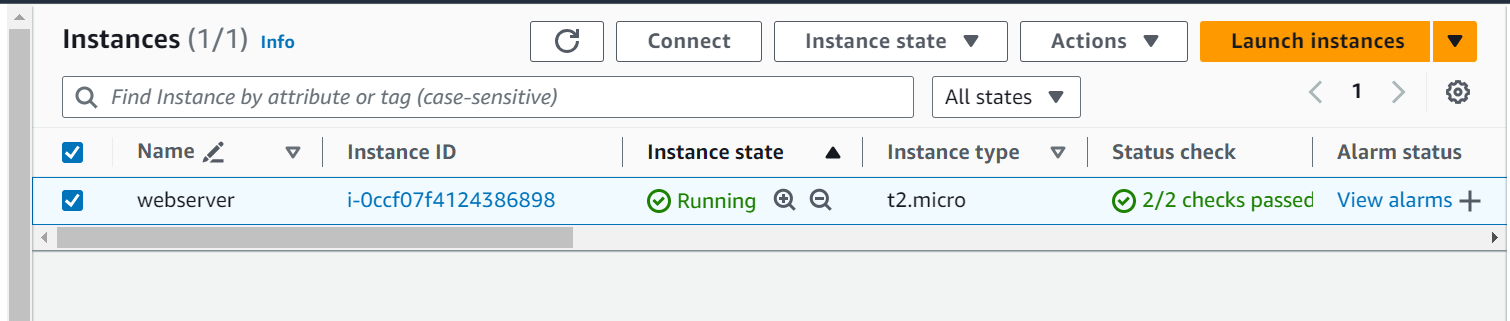
**Connecting EC2 with RDS Manually**

Create RDS with normal attributes

A screenshot of a computer

Description automatically generated

Step - 1 : Create EC2 webserver Linux AMI



Step – 2 : SSH into EC2 instance

A computer screen shot of a computer

Description automatically generated

Step – 3 : sudo su – (Root user)

A black screen with numbers and symbols

Description automatically generated

Step – 4 : yum update / dnf upgrade

Step – 5 : sudo dnf install -y httpd php php-mysqli mariadb105

Step – 6 : systemctl start httpd

Step – 7 : systemctl enable httpd

Step – 8 : cd /var/www

Step – 9 : mkdir inc

cd inc

vi dbinfo.inc

i

<?php

define('DB\_SERVER', 'db\_instance\_endpoint');

define('DB\_USERNAME', 'tutorial\_user');

define('DB\_PASSWORD', 'master password');

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

?>

A screen shot of a computer

Description automatically generated

esc + :wq!

Step – 10 : cd /var/www/html

vi SamplePage.php

i

<?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;

}

?>

Esc + :wq!

A screen shot of a computer code

Description automatically generated

Step – 11 : After that, ssh ec2, then go to /var/www

Vi dbiinfo.inc

Edit the details with RDS details

Step – 12 : Go to RDS Security Group

Edit inbound rule -> delete and add rule

Custom TCP -> Port(3306) -> copy private IP of EC2 with ip/32 only 1 ip -> Add description

Alternative - Can also connect SG of EC2 to SG of RDS[optional]

A screenshot of a computer

Description automatically generated

Step – 13 : In SSH : mysql -h <endpoint> -u root -p

Password

A screen shot of a computer screen

Description automatically generated

Step – 14 : Show databases

A screen shot of a computer

Description automatically generated

Step – 15 : Use Sample

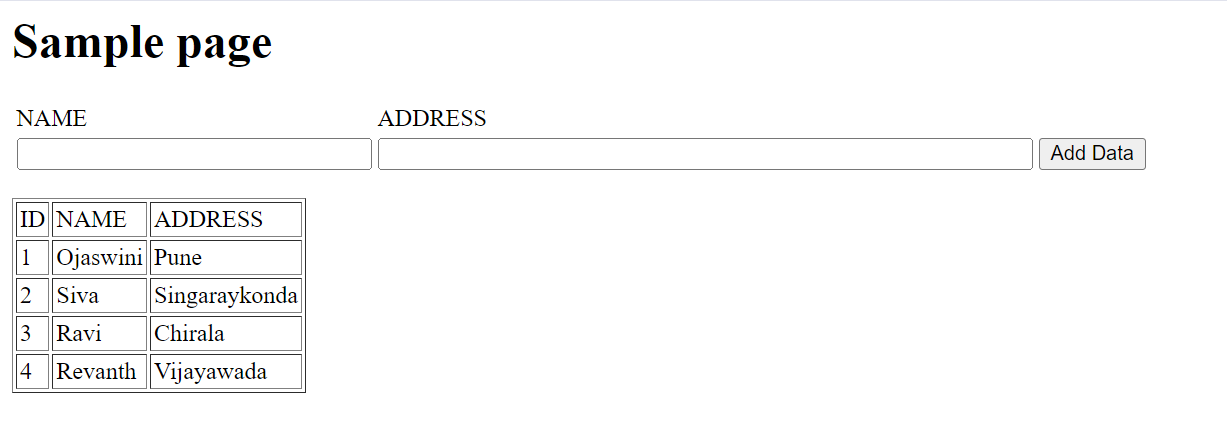
A screenshot of a computer program

Description automatically generated

Step – 16 : Copy the EC2 public ip and give in browser like this

http://<publicip>/SamplePage.php

Step – 17 : Add the data inside the table



Step – 18 : Now go to EC2 SSH, then check the table EMPLOEES;

A screenshot of a computer program

Description automatically generated

Now, you have completed the task.