Experiment No.: 10

Title: Write a program to insert and display database contents in and from MySQL database using PHP.

Objectives:

1. To study database handling in php
2. To study various functions for database connectivity, sending sql queries, reading and displaying formatted data, connection termination.

Theory:

To successfully use the PHP functions to talk to MySQL, you must have MySQL running at a location to which your Web server can connect (not necessarily the same machine as your Web server). You also must have created a user (with a password), and you must know the name of the database to which you want to connect. Using phpMyAdmin one can create a user, assign privileges to users, create databases, table's etc. using web user interface. Using phpMyAdmin create user with all authorities and privileges. Create academic database and student table. The fields in student table are rollno, name, class etc.

First step in database handling is to connect-

The `mysqli_connect()` function is the first function you must call when utilizing a PHP script to connect to MySQL. The basic syntax for the connection is

```
mysqli_connect("localhost", "username", "password");
```

Using actual sample values, the connection function looks like this:

```
$conn = mysqli_connect("localhost", "user5", "user5");
```

This function returns a connection index if the connection is successful or returns `false` if the connection fails.

Second step is to select the database-

```
mysqli_select_db(database name, connection index);

For example:

mysqli_select_db(database name, connection index);

mysqli_select_db("academic",$conn);
```

Third step is to insert into database:

In Form.php write following script:

```
<html>
<body>

<form action="database_handling.php" method="post">
Rollno: <input type="text" name="rollno" />
```

```
Name: <input type="text" name="name" />
Class: <input type="text" name="class" />
<input type="submit" />
</form>

</body>
</html>


$sql="INSERT INTO student (rollno, name, class)
        VALUES ('$_POST[rollno]','$_POST[name]','$_POST[class]')";

if (!mysqli_query($con , $sql))
  {
  die('Error: ' . mysqli_error());
  }
echo "1 record added";
```

Fourth step is to retrieve data and display in HTML format-

```
$result = mysqli_query("SELECT * FROM student");

echo "<table border='1'>
<tr>
<th>rollno</th>
<th>name</th>
<th>class</th>
</tr>";

while($row = mysqli_fetch_array($result))
  {
  echo "<tr>";
  echo "<td>" . $row['rollno'] . "</td>";
  echo "<td>" . $row['name'] . "</td>";
  echo "<td>" . $row['class'] . "</td>";
  echo "</tr>";
  }
echo "</table>";
```

Key concepts: mysqli_query, mysqli_fetch_array, mysqli_select_db, mysqli_connect

Algorithm:

- Create user using phpMyAdmin.
- Create form.php to read students data and put above shown script in it and save it in /xampp/htdocs directory.
- Create database_handling.php to connect to database and to manipulate data.
- In form.php on click submit button invoke database_handling.php script.
- In database_handling.php write php functions for connection, selection of database, sending Sql queries, retrieving data and display it in tabular format.
- Open browser and type http://localhost/form.php