Hands-on Lab : INSERT, UPDATE, DELETE

Estimated time needed: 30 minutes

In this lab, you will learn some commonly used DML (Data Manipulation Language) statements of SQL, other than SELECT. First, you will learn the INSERT statement, which is used to insert new rows into a table. Next, you will learn the UPDATE statement which is used to update the data in existing rows in the table. Lastly, you will learn the DELETE statement which is used to remove rows from a table.

Here does the syntax of an INSERT statement look?

```
-- %
-- %
-- %
-- %
-- %
-- INSERT INTO Table_name (column1, column2, ...) ...
-- INSERT INTO Table_name (column1, ...) ...
-- %
-- %
-- %
```

Output

Here does the syntax of an UPDATE statement look?

```
-- %
-- %
-- %
-- %
-- %
-- UPDATE Table_name
-- SET column1 = value1, column2 = value2, ...
-- WHERE condition
-- %
-- %
-- %
```

Output

Here does the syntax of a DELETE statement look?

```
-- %
-- %
-- %
-- %
-- %
-- DELETE FROM Table_name
-- WHERE condition
-- %
-- %
-- %
```

Output

Software Used in this Lab

In this lab, you will find **phpMyadmin**, an open source tool written in PHP intended to handle the administration of MySQL over the Web. phpMyadmin supports a wide range of operations on MySQL and databases. Frequently used operations (managing databases, tables, columns, relations, indexes, users, permissions, etc) can be performed via the user interface, while you still have the ability to directly execute any SQL statement.

Database Used in this Lab

The dataset used in this lab is an internal database.

Objectives

After completing this lab, you will be able to:

- Insert data into a table
- Update data in existing rows of the table
- Remove rows from a table

Exploring the Database

Let us first explore the **Instructor** database using the **Datasette** tool.

1. On the statement listed below is not already in the Datasette textbox on the right, then copy the code below by clicking on the little copy button on the bottom right of the codeblock below and then paste it into the textbox of the Datasette tool using either **Ctrl+V** or right-click in the text box and choose **Paste**.

```
-- %
-- SELECT * FROM Instructor;
```

Output

2. Click **Submit Query**.

3. Now you successfully have the table and explore all the column attributes of the **Instructor** table to get an overall idea of the table contents.

ROW	SHNUM	FCNAME	ID	CITY
1	1Prod	Dan	31416	LA
2	2Dvlp	Mary	31416	LA
3	3Analyst	Jenny	27 Image	LA

4. These are the column attribute descriptions from the **Instructor** table:

```
-- %
-- %
-- %
-- %
-- %
```