

A decorative graphic on the left side of the slide, consisting of a network of white lines and circles on a blue gradient background, resembling a circuit board or a neural network.

WEEK 5

SQL – INSERTING, UPDATING AND DELETING ROWS OF DATA

STUDENT OBJECTIVES

- Upon completion of this video, you should be able to:
 - Insert rows of data into a table
 - Update a row(s) of data in a table or some attributes within rows in a table
 - Delete a row of data from a table
 - Show the attribute names and types for an existing table

INSERTING Data Into Tables:

```
INSERT INTO TableName (Attr1Name, Attr2Name, Attr3Name)  
VALUES (value1, value2, value3);
```

OR

```
INSERT INTO TableName VALUES (value1, value2, value3);
```

NOTE: if you use this method you must put a value for EVERY field and in the correct order that the fields are in the table

Example:

```
INSERT INTO owner (firstname, lastname, ownerid) VALUES  
('Laura', 'Reid', 1);
```

UPDATING Existing Data:

UPDATE TableName SET AttrName = 'Value' WHERE Condition;

Example:

*UPDATE owner SET firstname="Elaine" WHERE firstname
="Laura";*

EXAMPLES USING QUOTES:

```
mysql> SELECT 'hello', "hello", ""hello"", 'hel'lo', '\hello';
```

```
+-----+-----+-----+-----+-----+
| hello | "hello" | ""hello"" | hel'lo | 'hello |
+-----+-----+-----+-----+-----+
```

```
mysql> SELECT "hello", "'hello'", '"hello"', "hel"lo", "\"hello";
```

```
+-----+-----+-----+-----+-----+
| hello | 'hello' | '"hello"' | hel"lo | "hello |
+-----+-----+-----+-----+-----+
```

```
mysql> SELECT 'This\nIs\nFour\nLines';
```

```
+-----+
| This
Is
Four
Lines |
+-----+
```

```
mysql> SELECT 'disappearing\ backslash';
```

```
+-----+
| disappearing backslash |
+-----+
```

DELETING Tuples From Tables:

DELETE FROM TableName WHERE Condition

Example:

DELETE FROM owner WHERE lastname = 'Reid';

Getting information back (if you can't remember table names or column names)

SHOW DATABASES;
SHOW TABLES;
SHOW COLUMNS IN tablename;

e.g. SHOW COLUMNS IN employee;

```
mysql> show databases;
+-----+
| Database |
+-----+
| information_schema |
| laurascompany |
| lreid2tadb |
| mysql |
| performance_schema |
| testinclass |
| vetdb |
+-----+
7 rows in set (0.01 sec)

mysql> show tables;
+-----+
| Tables_in_lurascompany |
+-----+
| DEPARTMENT |
| EMPLOYEE |
| PROJECT |
| WORKS_ON |
+-----+
4 rows in set (0.00 sec)

mysql> show columns in EMPLOYEE;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| SSN | varchar(9) | NO | PRI | NULL | |
| lastname | varchar(20) | YES | | NULL | |
| firstname | varchar(20) | YES | | NULL | |
| sex | varchar(1) | YES | | NULL | |
| deptno | char(3) | YES | | NULL | |
| city | varchar(10) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)
```