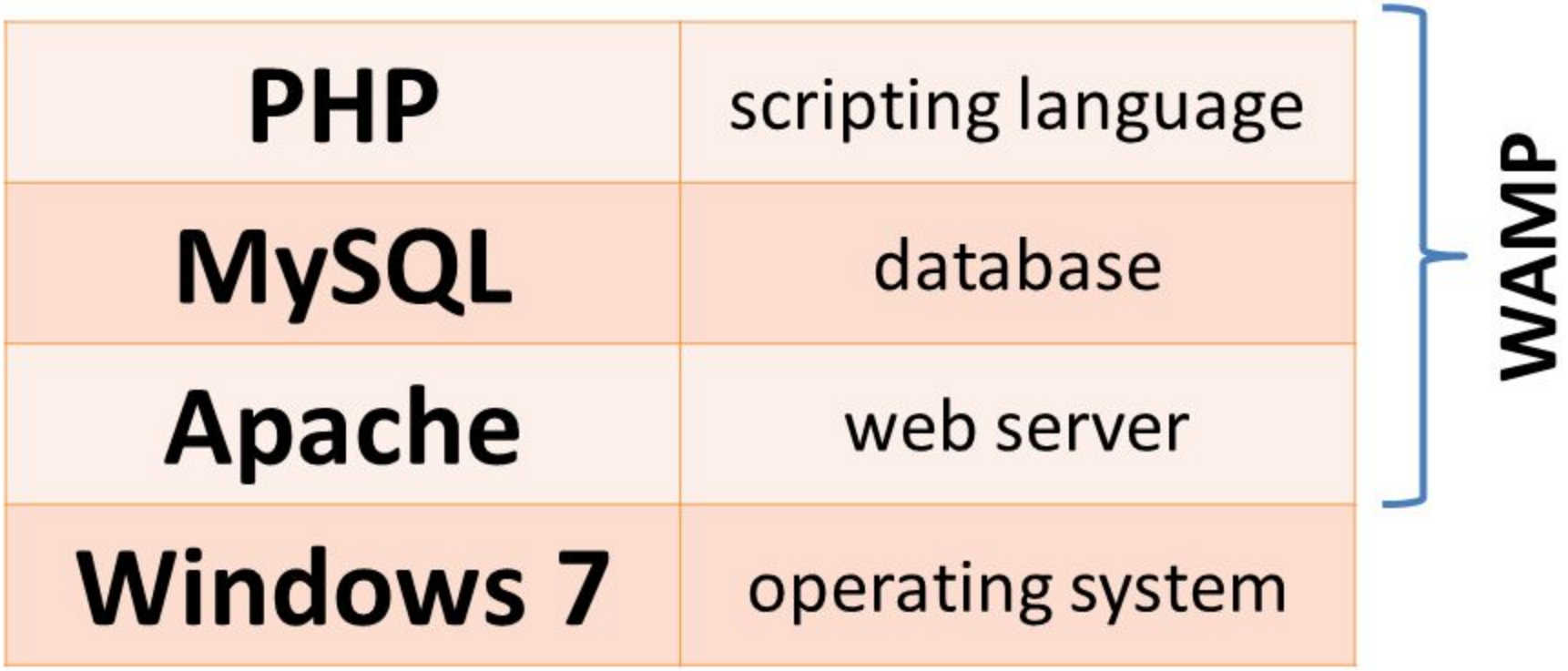
MySQL

MySQL and PHP – interacting with a database

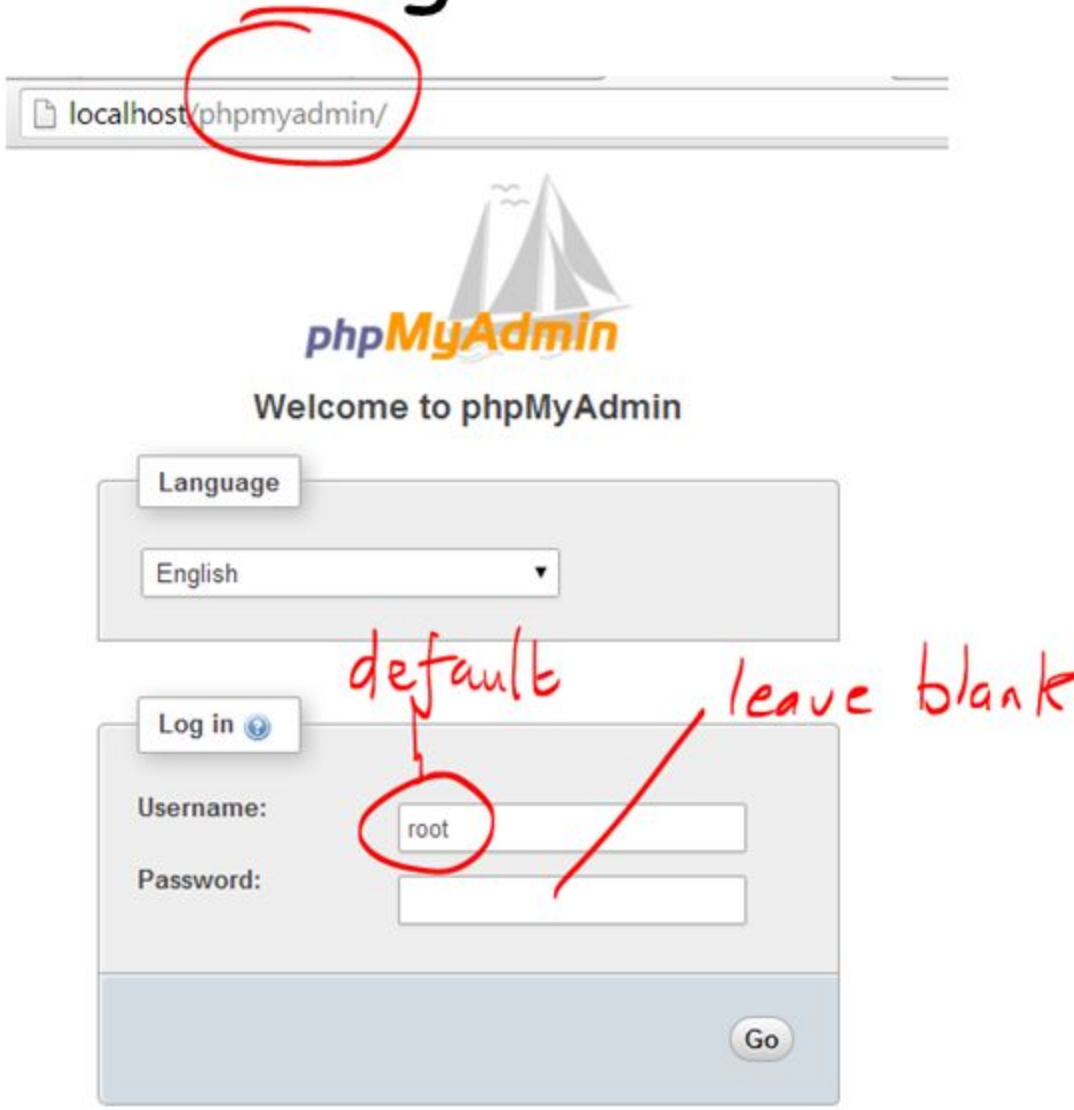
Stack System

- It is assumed a stack system has been created with a testing server running, and a database linked to a web page, e.g.



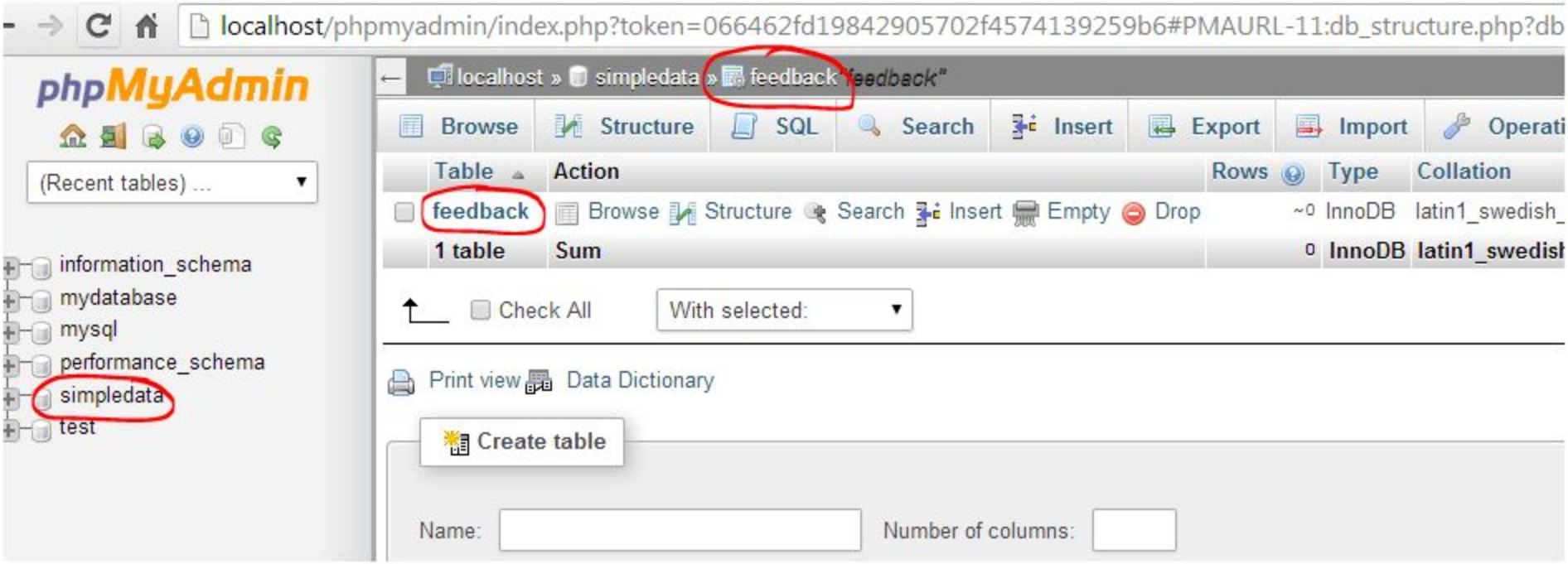
Can log on to MySQL with administrator rights

- http;//localhost/phpmyadmin
- Username is **root**
- If your database is for a live web project use a password and different username for security
- As this is a testing server used locally, there is no password, just the username **admin**



Database **simpledata** created earlier (example)

Table **feedback** created inside simpledata



PHPMyAdmin (MySQL) settings

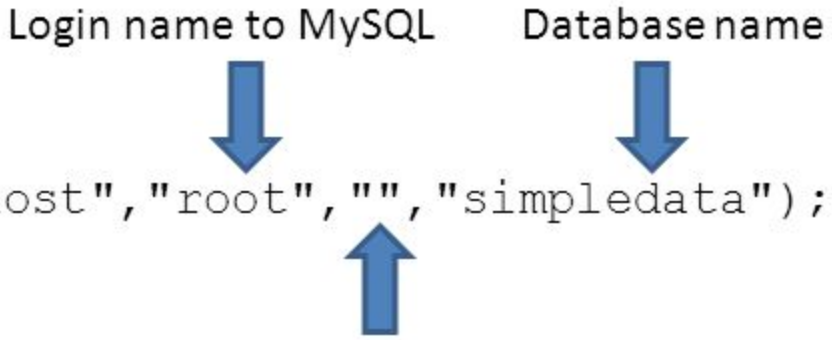
- Name of host: **localhost** (default name for most testing servers)
- Login: MySQL database (PHPMyAdmin)
  login name: **root** (default name which you would change if using the website live)
- Password: leave blank
- Database name: simpledata
- Table name (inside database): feedback.

If you experience problems you can go back to the other PowerPoint presentation showing you how to set up a MySQL database in PHPMyAdmin.

Access PHPMyAdmin from a web page in Dreamweaver.

Database linked to web page with PHP

- The following opens the connection to the server and database **simpledata.php**



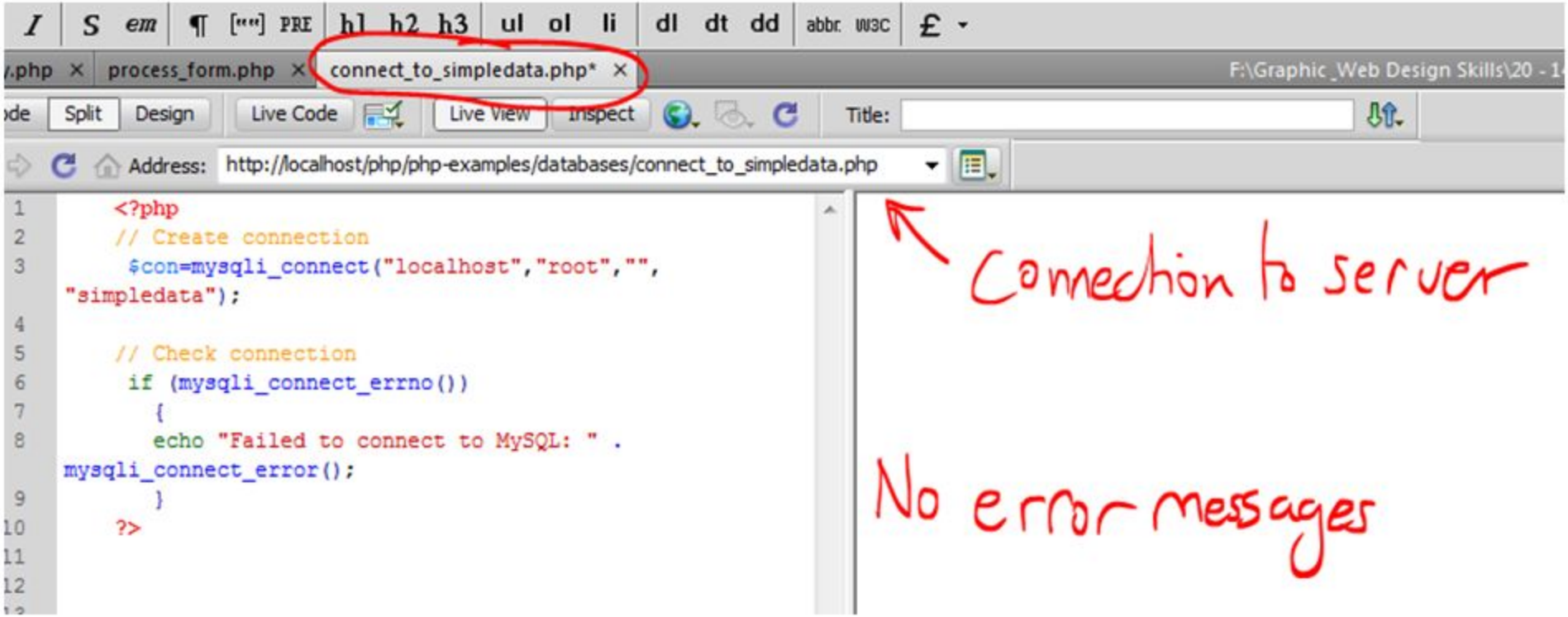

```
<?php
// Create connection
 $con=mysqli_connect("localhost","root","","simpledata");

// Check connection
 if (mysqli_connect_errno())
   {
   echo "Failed to connect to MySQL: " .
mysqli_connect_error();
   }
?>
```

- An If statement checks for any errors and displays an error message if the connection fails.
- No error messages mean it works!

Accessing the database using PHP

- PHP script created in Dreamweaver.



Presenting a database using PHP

- The SELECT statement is used to select data from a database:
- Add the following PHP

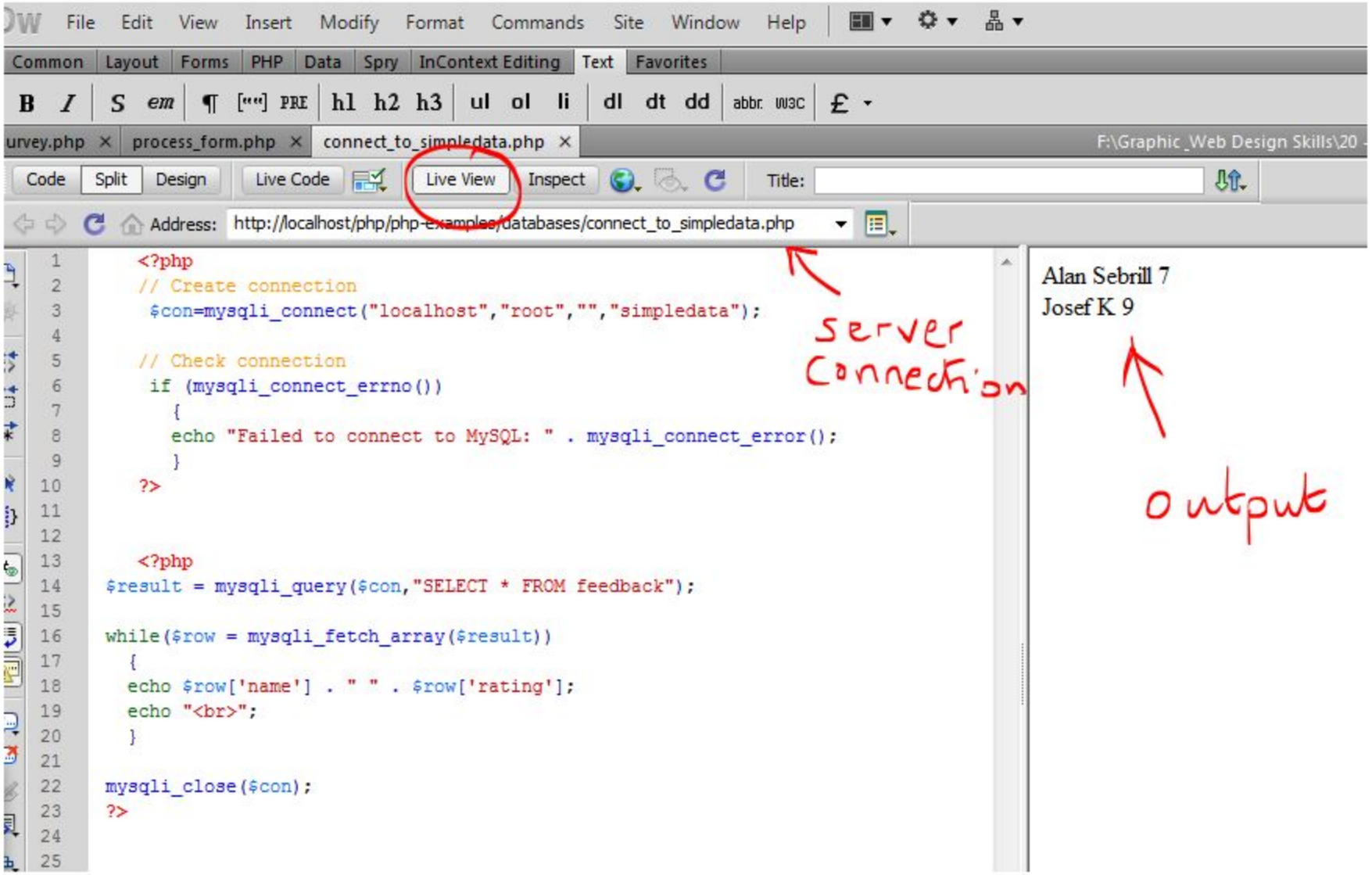
```
<?php
$result = mysqli_query($con,"SELECT * FROM feedback");

while($row = mysqli_fetch_array($result))
  {
  echo $row['name'] . " " . $row['rating'];
  echo "<br>";
  }
 mysqli_close($con);
 ?>
```

- The data from the table **feedback** is returned by the mysqli_query() function and stored in the $result variable.
- The mysqli_fetch_array() function returns the first row from the table as an **array** variable **&row**.
- The while loop allows mysqli_fetch_array() to return the next row in the recordset. The while loop loops through all the rows.
- To **echo** the value of each row, we use the PHP $row array variable ($row['FirstName'] and $row['LastName']).

Presenting a database using PHP

- The source code and live view will look similar to this



Selecting and changing a database

PHPMyAdmin MYSQL and Dreamweaver

Accessing using MySQL/PHP

- Specify a range of MySQL commands to interact with a database **simpledata** from PHP (in Dreamweaver)
- Add new records to the table **feedback**
- Delete a record from the table **feedback**
- List records from the database **feedback**
- Amend data from the database **feedback** and list
- Select a range of data using **comparitors (e.g. < less than)**

International Cheese (new database)

- Create a new **database** called **cheese**, using PHP
- Create a new table **international_cheese.php**
- Add records to the table
  (e.g. name, country, strength, image, in_stock)
- Output data from table using PHP.
- Save the web page as **cheese.php**

Create a new database

- If the database **cheese** does not exist you can create it as shown below.

Editing MySQL

- You can change the PHP and edit the MySQL code to be more selective in the process.
- For more info on MySQL, check http://www.w3schools.com/php/php_mysql_intro.asp

E.g. to select from database only records where the name is "Sam Lowry" change the line

```
$result = mysqli_query($con,"SELECT* FROM feedback");
```

To

```
$result = mysqli_query($con,"SELECT* FROM feedback WHERE
name='Sam Lowry'");
```

Editing MySQL