Select Data From a Database Table

The SELECT statement is used to select data from a database.

Syntax

SELECT column\_name(s)  
FROM table\_name

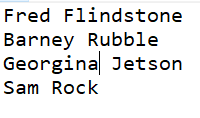
To get PHP to execute the statement above we must use the mysqli\_query() function. This function is used to send a query or command to a MySQL connection.

Example

The following example selects all the data stored in the "Persons" table (The \* character selects all the data in the table):

<?php  
$con=mysqli\_connect("localhost","root","","my\_db");  
// Check connection  
if (mysqli\_connect\_errno()) {  
  echo "Failed to connect to MySQL: " . mysqli\_connect\_error();  
}  
  
$result = mysqli\_query($con,"SELECT \* FROM Persons");  
  
while($row = mysqli\_fetch\_array($result)) {  
  echo $row['FirstName'] . " " . $row['LastName'];  
  echo "<br>";  
}  
  
mysqli\_close($con);  
?>

e.g .The output code could be:



Note that above you have used SQL to select from the table in my\_db.

To select all records, you need to set up a loop (the while loop) and iniate the fetch array function.

This retrieves the data from the table, and lists it down the page.

A neater way to display data on a webpage is with the use of a table.

In the example below, we open the connection to the database, then close it again at the end of the page.

Display the Result in an HTML Table

The following example selects the same data as the example above, but will display the data in an HTML table:

Note the use of th (table header for the headings-or field names) and the remainder of the td cells contain data from the database table

<?php  
$con=mysqli\_connect("localhost","root","","my\_db");  
// Check connection  
if (mysqli\_connect\_errno()) {  
  echo "Failed to connect to MySQL: " . mysqli\_connect\_error();  
}  
  
$result = mysqli\_query($con,"SELECT \* FROM Persons");  
  
echo **"**<table border='1'> **<**tr>  
<th>Firstname</th>  
<th>Lastname</th>  
</tr>";  
  
while($row = mysqli\_fetch\_array($result)) {  
  echo "<tr>";  
  echo "<td>" . $row['FirstName'] . "</td>";  
  echo "<td>" . $row['LastName'] . "</td>";  
  echo "</tr>";  
}  
  
echo "</table>";  
  
mysqli\_close($con);  
?>

The output of the code above will be:

|  |  |
| --- | --- |
| **Firstname** | **Lastname** |
| Glenn | Quagmire |
| Peter | Griffin |

We can also filter records using the WHERE clause

The WHERE clause

The WHERE clause is used to extract only those records that fulfill a specified criterion.

Syntax

SELECT column\_name(s)  
FROM table\_name  
WHERE column\_name operator value

To learn more about SQL, please visit our [SQL tutorial](http://www.w3schools.com/sql/default.asp).

To get PHP to execute the statement above we must use the mysqli\_query() function. This function is used to send a query or command to a MySQL connection.

Example

The following example selects all rows from the "Persons" table where "FirstName='Peter'":

<?php  
$con=mysqli\_connect("localhost","root","","my\_db");  
// Check connection  
if (mysqli\_connect\_errno()) {  
  echo "Failed to connect to MySQL: " . mysqli\_connect\_error();  
}  
  
$result = mysqli\_query($con,"SELECT \* FROM Persons  
WHERE FirstName='Peter'");  
  
while($row = mysqli\_fetch\_array($result)) {  
  echo $row['FirstName'] . " " . $row['LastName'];  
  echo "<br>";  
}  
?>

As well as The ORDER BY Keyword

The ORDER BY keyword is used to sort the data in a recordset.

The ORDER BY keyword sorts the records in ascending order by default.

If you want to sort the records in a descending order, you can use the DESC keyword.

Syntax

SELECT column\_name(s)  
FROM table\_name  
ORDER BY column\_name(s) ASC|DESC

Example

The following example selects all the data stored in the "Persons" table, and sorts the result by the "Age" column:

<?php  
$con=mysqli\_connect("localhost","root","","my\_db");  
// Check connection  
if (mysqli\_connect\_errno()) {  
  echo "Failed to connect to MySQL: " . mysqli\_connect\_error();  
}  
  
$result = mysqli\_query($con,"SELECT \* FROM Persons ORDER BY age");  
  
while($row = mysqli\_fetch\_array($result)) {  
  echo $row['FirstName'];  
  echo " " . $row['LastName'];  
  echo " " . $row['Age'];  
  echo "<br>";  
}  
  
mysqli\_close($con);  
?>

The output of the code above will be:

Glenn Quagmire 33  
Peter Griffin 35

Order by Two Columns

It is also possible to order by more than one column. When ordering by more than one column, the second column is only used if the values in the first column are equal.

Syntax

SELECT column\_name(s)  
FROM table\_name  
ORDER BY column1, column2

filter, we can also apply an order command in SQL.

## Update Data In a Database

The UPDATE statement is used to update existing records in a table.

### Syntax

UPDATE table\_name  
SET column1=value, column2=value2,...  
WHERE some\_column=some\_value

**Note:** Notice the WHERE clause in the UPDATE syntax. The WHERE clause specifies which record or records should be updated. If you omit the WHERE clause, all records will be updated!

To learn more about SQL, please visit our [SQL tutorial](http://www.w3schools.com/sql/default.asp).

To get PHP to execute the statement above we must use the mysqli\_query() function. This function is used to send a query or command to a MySQL connection.

### Example

Earlier in the tutorial we created a table named "Persons". Here is how it looks:

|  |  |  |
| --- | --- | --- |
| **FirstName** | **LastName** | **Age** |
| Peter | Griffin | 35 |
| Glenn | Quagmire | 33 |

The following example updates some data in the "Persons" table:

<?php  
$con=mysqli\_connect("localhost","root","","my\_db");  
// Check connection  
if (mysqli\_connect\_errno()) {  
  echo "Failed to connect to MySQL: " . mysqli\_connect\_error();  
}  
  
mysqli\_query($con,"UPDATE Persons SET Age=36  
WHERE FirstName='Peter' AND LastName='Griffin'");  
  
mysqli\_close($con);  
?>

After the update, the "Persons" table will look like this:

|  |  |  |
| --- | --- | --- |
| **FirstName** | **LastName** | **Age** |
| Peter | Griffin | 36 |
| Glenn | Quagmire | 33 |

Delete Data In a Database

The DELETE FROM statement is used to delete records from a database table.

Syntax

DELETE FROM table\_name  
WHERE some\_column = some\_value

**Note:** Notice the WHERE clause in the DELETE syntax. The WHERE clause specifies which record or records that should be deleted. If you omit the WHERE clause, all records will be deleted!

To learn more about SQL, please visit our [SQL tutorial](http://www.w3schools.com/sql/default.asp).

To get PHP to execute the statement above we must use the mysqli\_query() function. This function is used to send a query or command to a MySQL connection.

Example

Look at the following "Persons" table:

|  |  |  |
| --- | --- | --- |
| **FirstName** | **LastName** | **Age** |
| Peter | Griffin | 35 |
| Glenn | Quagmire | 33 |

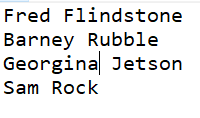
The following example deletes all the records in the "Persons" table where LastName='Griffin':

<?php  
$con=mysqli\_connect("localhost","root","","my\_db");  
// Check connection  
if (mysqli\_connect\_errno()) {  
  echo "Failed to connect to MySQL: " . mysqli\_connect\_error();  
}  
  
mysqli\_query($con,"DELETE FROM Persons WHERE LastName='Griffin'");  
  
mysqli\_close($con);  
?>

EXERCISE

1. Call up the data in your my\_db on the page without a table

e.g the output could look like this:



1. Call up the table data in an HTML table.

The output could look like this:

|  |  |
| --- | --- |
| **Firstname** | **Lastname** |
| Glenn | Quagmire |
| Peter | Griffin |

1. Select only records containing a particular first name. Display in a table.
2. Make amendments to your data using the UPDATE command.
3. Delete one record from your database using the delete command.

Make screen shots of your results,put them in a folder with your php files, then zip them up and submit one zipped file.