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classic layout

Queries[**¶**](#30j0zll)

Query Basics[**¶**](#1fob9te)

Regular Queries[**¶**](#3znysh7)

To submit a query, use the **query** function:

$this->db->query('YOUR QUERY HERE');

The query() function returns a database result **object** when “read” type queries are run, which you can use to [show your results](http://docs.google.com/results.html). When “write” type queries are run it simply returns TRUE or FALSE depending on success or failure. When retrieving data you will typically assign the query to your own variable, like this:

$query = $this->db->query('YOUR QUERY HERE');

Simplified Queries[**¶**](#2et92p0)

The **simple\_query** method is a simplified version of the $this->db->query() method. It DOES NOT return a database result set, nor does it set the query timer, or compile bind data, or store your query for debugging. It simply lets you submit a query. Most users will rarely use this function.

It returns whatever the database drivers’ “execute” function returns. That typically is TRUE/FALSE on success or failure for write type queries such as INSERT, DELETE or UPDATE statements (which is what it really should be used for) and a resource/object on success for queries with fetchable results.

if ($this->db->simple\_query('YOUR QUERY'))  
{  
 echo "Success!";  
}  
else  
{  
 echo "Query failed!";  
}

Note

PostgreSQL’s pg\_exec() function (for example) always returns a resource on success, even for write type queries. So take that in mind if you’re looking for a boolean value.

Working with Database prefixes manually[**¶**](#tyjcwt)

If you have configured a database prefix and would like to prepend it to a table name for use in a native SQL query for example, then you can use the following:

$this->db->dbprefix('tablename'); // outputs prefix\_tablename

If for any reason you would like to change the prefix programatically without needing to create a new connection, you can use this method:

$this->db->set\_dbprefix('newprefix\_');  
$this->db->dbprefix('tablename'); // outputs newprefix\_tablename

Protecting identifiers[**¶**](#3dy6vkm)

In many databases it is advisable to protect table and field names - for example with backticks in MySQL. **Query Builder queries are automatically protected**, however if you need to manually protect an identifier you can use:

$this->db->protect\_identifiers('table\_name');

Important

Although the Query Builder will try its best to properly quote any field and table names that you feed it, note that it is NOT designed to work with arbitrary user input. DO NOT feed it with unsanitized user data.

This function will also add a table prefix to your table, assuming you have a prefix specified in your database config file. To enable the prefixing set TRUE (boolean) via the second parameter:

$this->db->protect\_identifiers('table\_name', TRUE);

Escaping Queries[**¶**](#1t3h5sf)

It’s a very good security practice to escape your data before submitting it into your database. CodeIgniter has three methods that help you do this:

1. **$this->db->escape()** This function determines the data type so that it can escape only string data. It also automatically adds single quotes around the data so you don’t have to:  
   $sql = "INSERT INTO table (title) VALUES(".$this->db->escape($title).")";
2. **$this->db->escape\_str()** This function escapes the data passed to it, regardless of type. Most of the time you’ll use the above function rather than this one. Use the function like this:  
   $sql = "INSERT INTO table (title) VALUES('".$this->db->escape\_str($title)."')";
3. **$this->db->escape\_like\_str()** This method should be used when strings are to be used in LIKE conditions so that LIKE wildcards (‘%’, ‘\_’) in the string are also properly escaped.

$search = '20% raise';  
$sql = "SELECT id FROM table WHERE column LIKE '%" .  
 $this->db->escape\_like\_str($search)."%' ESCAPE '!'";

Important

The escape\_like\_str() method uses ‘!’ (exclamation mark) to escape special characters for *LIKE* conditions. Because this method escapes partial strings that you would wrap in quotes yourself, it cannot automatically add the ESCAPE '!' condition for you, and so you’ll have to manually do that.

Query Bindings[**¶**](#4d34og8)

Bindings enable you to simplify your query syntax by letting the system put the queries together for you. Consider the following example:

$sql = "SELECT \* FROM some\_table WHERE id = ? AND status = ? AND author = ?";  
$this->db->query($sql, array(3, 'live', 'Rick'));

The question marks in the query are automatically replaced with the values in the array in the second parameter of the query function.

Binding also work with arrays, which will be transformed to IN sets:

$sql = "SELECT \* FROM some\_table WHERE id IN ? AND status = ? AND author = ?";  
$this->db->query($sql, array(array(3, 6), 'live', 'Rick'));

The resulting query will be:

SELECT \* FROM some\_table WHERE id IN (3,6) AND status = 'live' AND author = 'Rick'

The secondary benefit of using binds is that the values are automatically escaped, producing safer queries. You don’t have to remember to manually escape data; the engine does it automatically for you.

Handling Errors[**¶**](#2s8eyo1)

**$this->db->error();**

If you need to get the last error that has occurred, the error() method will return an array containing its code and message. Here’s a quick example:

if ( ! $this->db->simple\_query('SELECT `example\_field` FROM `example\_table`'))  
{  
 $error = $this->db->error(); // Has keys 'code' and 'message'  
}

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