SELECT to Display Data

by Sophia Tutorial

WHAT'S COVERED

This tutorial shows how to limit your results to only the columns of information you desire. You will learn how to write an SQL query that displays only your chosen columns in two parts:

1. Using SELECT to Display Data
2. Displaying Multiple Columns

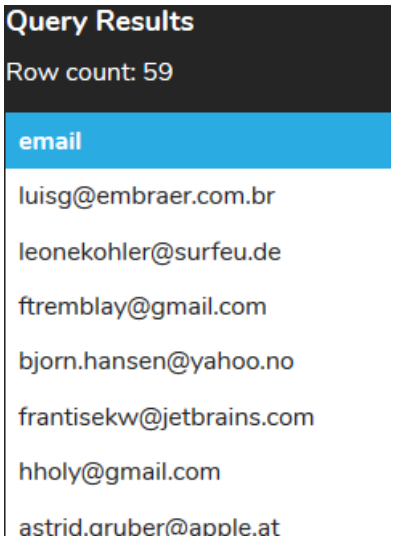
1. Using SELECT to Display Data

There are instances where you may not need or want to see all the data in a table at one time. For example, you may want to just see customers' email addresses to send out a marketing campaign email. To select only email addresses from the customer table in our Postgres tool, we can write a SELECT statement that lists the column that we would like to display instead of using the *. Looking at the column list under the **schema browser**, we can see the list of columns:

The eighth column contains the email addresses that we want to display. Using the SELECT statement, we can alter the SELECT clause to display just the email addresses instead of all columns by replacing the * with the specific column name. The query statement would be changed to:

```
SELECT email
FROM customer;
```

Running this statement displays only email addresses:



Query Results

Row count: 59

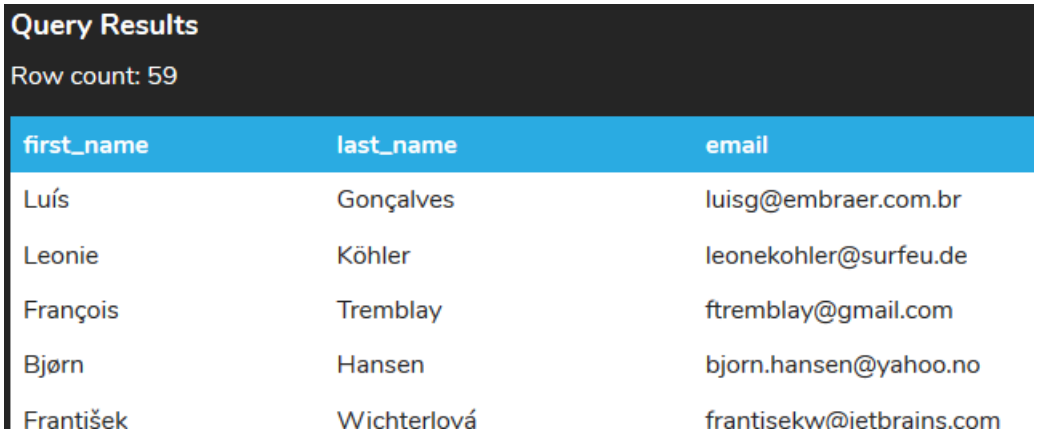
email
luisg@embraer.com.br
leonekohler@surfeu.de
ftremblay@gmail.com
bjorn.hansen@yahoo.no
frantisekw@jetbrains.com
hholy@gmail.com
astrid.gruber@apple.at

2. Displaying Multiple Columns

Perhaps we would like to also include the customers' first and last names. If we want to select more than one column, we need to separate out the column list using commas. For example:

```
SELECT first_name, last_name, email
FROM customer;
```

This would return the following result set:



Query Results

Row count: 59

first_name	last_name	email
Luís	Gonçalves	luisg@embraer.com.br
Leonie	Köhler	leonekohler@surfeu.de
François	Tremblay	ftremblay@gmail.com
Bjørn	Hansen	bjorn.hansen@yahoo.no
František	Wichterlová	frantisekw@jetbrains.com

If you want the column list to display in a different order, you can reorder the SELECT clause:

```
SELECT email, last_name, first_name
FROM customer;
```

Query Results

Row count: 59

email	last_name	first_name
luisg@embraer.com.br	Gonçalves	Luís
leonekohler@surfeu.de	Köhler	Leonie
ftremblay@gmail.com	Tremblay	François
bjorn.hansen@yahoo.no	Hansen	Bjørn
frantisekw@jetbrains.com	Wichterlová	František

You could even have the same column twice:

SELECT email, email
FROM customer;
This query returns:

Query Results

Row count: 59

email	email
luisg@embraer.com.br	luisg@embraer.com.br
leonekohler@surfeu.de	leonekohler@surfeu.de
ftremblay@gmail.com	ftremblay@gmail.com
bjorn.hansen@yahoo.no	bjorn.hansen@yahoo.no
frantisekw@jetbrains.com	frantisekw@jetbrains.com

This may not appear useful now, but when we focus on calculations in SELECT statements, we will revisit the purpose of having columns listed more than once.

Video Transcription

Instead of selecting All Columns utilizing the star, you can also specify the exact column names that split up, utilizing a comma. For example, if you want to get the address, the first name, and last name from the customer, this would only return, the columns associated with every single customer.

So go ahead and click on Run. You'll see the query results, with still 59 rows. However, we're only returning the columns for the address, the first name, and the last name of the customer.

TRY IT

Your turn! Open the SQL tool by clicking on the LAUNCH DATABASE button below. Then enter in one of the examples above and see how it works. Next, try your own choices for which columns you want the query to provide.

TERM TO KNOW

Schema Browser

A list of table names, column names, and data types contained within a database.

SUMMARY

In this tutorial, you learned how to write a SELECT statement to choose specific columns from your database table to display in the results.

Source: Authored by Vincent Tran