

Joins Exercises



[Download exercise starter code](#)

Part One: Getting Started

Let’s start with the following sql file called ***data.sql***.

Download the starter code, and first, take a look at the SQL in that file and make sure you understand what it is doing. Once you have read that code, run the following in the unzipped folder:

```
$ psql < data.sql
$ psql joins_exercise
```

Write the following SQL commands to produce the necessary output

- Join the two tables so that every column and record appears, regardless of if there is not an ***owner_id***. Your output should look like this:

```
/*
id | first_name | last_name | id | make | model | year | price | owner_id
-----+-----+-----+-----+-----+-----+-----+-----+-----
 1 | Bob        | Hope      | 1 | Toyota | Corolla | 2002 | 2999.99 | 
 1 | Bob        | Hope      | 2 | Honda  | Civic   | 2012 | 13000   | 
 2 | Jane       | Smith     | 3 | Nissan | Altima  | 2016 | 24000   | 
 2 | Jane       | Smith     | 4 | Subaru | Legacy  | 2006 | 5999.99 | 
 3 | Melody     | Jones     | 5 | Ford   | F150    | 2012 | 2599.99 | 
 3 | Melody     | Jones     | 6 | GMC    | Yukon   | 2016 | 13000   | 
 4 | Sarah      | Palmer    | 7 | GMC    | Yukon   | 2014 | 23000   | 
 4 | Sarah      | Palmer    | 8 | Toyota | Avalon  | 2009 | 13000   | 
 4 | Sarah      | Palmer    | 9 | Toyota | Camry   | 2013 | 13000   | 
 5 | Alex       | Miller    | 10 | Honda  | Civic   | 2001 | 7999.99 | 
 6 | Shana      | Smith     | 11 | Nissan | Altima  | 1999 | 1899.99 | 
 6 | Shana      | Smith     | 12 | Lexus  | ES350   | 1998 | 1599.99 | 
 6 | Shana      | Smith     | 13 | BMW    | 300     | 2012 | 23000   | 
 6 | Shana      | Smith     | 14 | BMW    | 700     | 2015 | 53000   | 
 7 | Maya       | Malarkin  |   |        |         |     |         | 
(15 rows)
*/
```

- Count the number of cars for each owner. Display the owners ***first_name***, ***last_name*** and ***count*** of vehicles. The first_name should be ordered in ascending order. Your output should look like this:

```
/*
first_name | last_name | count
-----+-----+-----
Alex       | Miller    | 1
Bob        | Hope      | 2
Jane       | Smith     | 2
Melody     | Jones     | 2
Sarah      | Palmer    | 3
Shana      | Smith     | 4
(6 rows)
*/
```

- Count the number of cars for each owner and display the average price for each of the cars as integers. Display the owners ***first_name***, ***last_name***, average price and count of vehicles. The ***first_name*** should be ordered in descending order. Only display results with more than one vehicle and an average price greater than 10000. Your output should look like this:

```
/*
first_name | last_name | average_price | count
-----+-----+-----+-----
Shana      | Smith     | 19875         | 4
Sarah      | Palmer    | 16333         | 3
Jane       | Smith     | 15000         | 2
*/
```

Part Two: SQL Zoo

Complete the exercises in the Tutorials steps 6 and 7 in <https://sqlzoo.net/>

Solution

[View Our Solution](#)