

SQL Joins

[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 1 | Bob |
Hope | 2 | Honda | Civic | 2012 | 13000 | 1 2 | Jane | Smith | 3 | Nissan |
Altim | 2016 | 24000 | 2 2 | Jane | Smith | 4 | Subaru | Legacy | 2006 |
5999.99 | 2 3 | Melody | Jones | 5 | Ford | F150 | 2012 | 2599.99 | 3 3 |
Melody | Jones | 6 | GMC | Yukon | 2016 | 13000 | 3 4 | Sarah | Palmer | 7 |
GMC | Yukon | 2014 | 23000 | 4 4 | Sarah | Palmer | 8 | Toyota | Avalon |
2009 | 13000 | 4 4 | Sarah | Palmer | 9 | Toyota | Camry | 2013 | 13000 | 4 5
| Alex | Miller | 10 | Honda | Civic | 2001 | 7999.99 | 5 6 | Shana | Smith |
11 | Nissan | Altima | 1999 | 1899.99 | 6 6 | Shana | Smith | 12 | Lexus |
ES350 | 1998 | 1599.99 | 6 6 | Shana | Smith | 13 | BMW | 300 | 2012 | 23000
| 6 6 | Shana | Smith | 14 | BMW | 700 | 2015 | 53000 | 6 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](#)