# MySQL Workshop

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# Workshop Plan

- Part 1: Simple Queries
- Part 2: Creating a database
- Part 3: Joining tables
- Part 4: complex queries
- Part 5: subqueries, sorting, wildcards, CSV input/output
- Reference:  https://cs.wellesley.edu/~cs304/mysql-workshop/

# Files for this Part

```
$ cd ~/workspace
$ curl -O https://cs.wellesley.edu/~cs304/mysql-workshop/part5.tar
$ tar xf part5.tar
$ cd part5
```

# CSV files

A common format for moving tables (rows and columns of data) from place to place or program to program is as "flat" files where

- each row is a line of the file, terminated by an OS-specific line ending
- each column is terminated or delimited by a comma (or a tab)

These files of **comma-separated values** are called CSV files.

If we use tabs, we could call them TSV files, but sometimes they are still called CSV
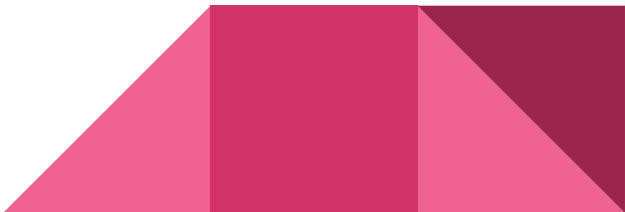
# TSV output from MySQL

When we use batch files from the shell, the columns are delimited (by default), by tabs, so this is really easy:

```
mysql-ctl cli < owners-and-pets.sql
mysql-ctl cli < owners-and-pets.sql > owners-and-pets.tsv
```

Then right-click the file and choose "download"

Open Excel and choose "File > import"

# CSV input to MySQL

If you have a CSV/TSV file:

```
$ mysql -u scottdanderson --local-infile
mysql> use c9;
mysql> load data local infile 'foo.csv' into table bar
    -> fields terminated by '\t'
    -> lines terminated by '\n';
```

See pet_owners.sql

# Summary of Part 5

- CSV is a common and useful data interchange format
- Embedded commas and even newlines can be a nightmare
- Tabs are often easier