

MySQL

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Plan

- Part 1: Simple Queries
- Part 2: Creating a database
- Part 3: Joining tables
- Part 4: complex queries
- Part 5: CSV input/output
- Reference: <https://cs.wellesley.edu/~cs304/downloads/>



Files for this Part

```
$ cd ~/cs304
```

```
$ cp -r ~/cs304/pub/downloads/part5 .
```

```
$ 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 < owners-and-pets.sql
```

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

Then you can SCP the TSV file wherever you need it to go. Copy it to your Mac

Open Excel and choose "File > import"



CSV input to MySQL

If you have a CSV/TSV file:

```
$ mysql
```

```
mysql> load data local infile 'foo.csv' into table bar
```

```
-> fields terminated by '\t'
```

```
-> lines terminated by '\n';
```

See `pet-owners-create-and-load.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

