

# Lab-Musical Track Database (CSV)

Sunday, November 13, 2022 11:06 PM

- Follow the lecture from previous video

Your answer is correct, score saved.

## Musical Track Database

This application will read an iTunes library in comma-separated-values (CSV) and produce a table as specified below.

To get the data for this assignment, download this file <https://www.pg4e.com/tools/sql/library.csv> into the folder on system where you are running your `psql` client or Jupyter notebooks. Two commands to download the file into a terminal or shell are:

```
wget https://www.pg4e.com/tools/sql/library.csv
curl -O https://www.pg4e.com/tools/sql/library.csv
```

If you don't have either `wget` or `curl` installed you will need to download the CSV file and upload or copy it to the folder where you are running your SQL client.

Database details:

Host:   
Port:   
Database:   
User:   
Password: (hide/show copy)

Here is the the `psql` command to access your database:

```
psql -h pg.pg4e.com -p 5432 -U pg4e_d1fcd1185c pg4e_d1fcd1185c
```

Here is the structure of the tables you will need for this assignment:

```
CREATE TABLE track_raw
(title TEXT, artist TEXT, album TEXT,
count INTEGER, rating INTEGER, len INTEGER);
```

We will ignore the artist field for this assignment and focus on the many-to-one relationship between tracks and albums. If you run the program multiple times in testing or with different files, make sure to empty out the data before each run.

Once you have the table created and the CSV file in the correct location, you can load it into the `track_raw` table using the `psql\copy` command.

```
\copy track_raw(title,artist,album,count,rating,len) FROM 'library.csv' WITH DELIMITER ',' CSV;
```

To grade this assignment, the program will run a query like this on your database and look for the data it expects to see:

```
SELECT title, album FROM track_raw ORDER BY title LIMIT 3;
```

The expected result of this query on your database is:

title	album
A Boy Named Sue (live)	The Legend Of Johnny Cash
A Brief History of Packets	Computing Conversations
Agua De Marco	Natural Wonders Music Sampler 1999



Bash console 26253353

Share with others

```
07:08 ~ $ wget https://www.pg4e.com/tools/sql/library.csv
--2022-11-14 07:08:51-- https://www.pg4e.com/tools/sql/library.csv
Resolving proxy.server (proxy.server)... 10.0.0.245
Connecting to proxy.server (proxy.server)[10.0.0.245]:3128... connected.
Proxy request sent, awaiting response... 200 OK
Length: 19495 (19K) [text/csv]
Saving to: 'library.csv'
```

```
library.csv 100%[=====] 19.04K --.-KB/s in 0.07s
```

```
2022-11-14 07:08:52 (271 KB/s) - 'library.csv' saved [19495/19495]
```

```
07:08 ~ $ ls
README.txt library.csv
07:09 ~ $ ls -l
total 24
-rwxr-xr-x 1 jose03 registered_users 232 Nov 1 06:23 README.txt
-rw-rw-r-- 1 jose03 registered_users 19495 Apr 20 2020 library.csv
07:09 ~ $ vi library.csv
07:10 ~ $ psql -h pg.pg4e.com -p 5432 -U pg4e_d1fcd1185c pg4e_d1fcd1185c
Password for user pg4e_d1fcd1185c:
psql (12.11 (Ubuntu 12.11-1.pgdg20.04+1), server 11.7 (Ubuntu 11.7-2.pgdg18.04+1))
SSL connection (protocol: TLSv1.3, cipher: TLS_AES_256_GCM_SHA384, bits: 256, compression: off)
Type "help" for help.
```

```

pg4e_d1fcd1185c=> \dt
                    List of relations
 Schema | Name      | Type  | Owner
-----|-----|-----|-----
 public | ages      | table | pg4e_d1fcd1185c
 public | automagic | table | pg4e_d1fcd1185c
 public | pg4e_debug | table | pg4e_d1fcd1185c
 public | pg4e_meta | table | pg4e_d1fcd1185c
 public | pg4e_result | table | pg4e_d1fcd1185c
(5 rows)

pg4e_d1fcd1185c=> CREATE TABLE track_raw
pg4e_d1fcd1185c-> (title TEXT, artist TEXT, album TEXT,
pg4e_d1fcd1185c-> count INTEGER, rating INTEGER, len INTEGER);
CREATE TABLE
pg4e_d1fcd1185c=> \copy track_raw(title,artist,album,count,rating,len) FROM 'library.csv' WITH DELIMITER ',' CSV;
COPY 296
pg4e_d1fcd1185c=> select count(*) from track_raw;
 count
-----
    296
(1 row)

pg4e_d1fcd1185c=> SELECT title, album FROM track_raw ORDER BY title LIMIT 3;
      title      | album
-----|-----
 A Boy Named Sue (live) | The Legend of Johnny Cash
 A Brief History of Packets | Computing Conversations
 Aguas De Marco | Natural Wonders Music Sampler 1999
(3 rows)

```