

TerminalShellEditViewWindowHelp

Securehttps://dev.mysql.com/doc/employee/en/sakila-structure.html

Employees Sample Database / Employees Structure

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5 Employees Structure

The following diagram provides an overview of the structure of the Employees sample database.

Figure 1 The Employees Schema

```
graph TD
    departments -- "1:M" --> dept_emp
    departments -- "1:M" --> dept_manager
    employees -- "1:M" --> dept_emp
    employees -- "1:M" --> dept_manager
    employees -- "1:M" --> salaries
    employees -- "1:M" --> titles
```

mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
mysql> select count(*) from employees;
+-----+
| count(*) |
+-----+
| 300024 |
+-----+
1 row in set (0.04 sec)

mysql> select count(*) from dept_emp;
+-----+
| count(*) |
+-----+
| 331603 |
+-----+
1 row in set (0.05 sec)

mysql> select count(*) from employees e, dept_emp d where e.emp_no=d.emp_no;
+-----+
| count(*) |
+-----+
| 331603 |
+-----+
1 row in set (0.66 sec)

mysql> select t.title,count(*) from employees e, titles t where e.emp_no=t.emp_no and t.title not like '%Engineer%' group by t.title;
+-----+-----+
| title | count(*) |
+-----+-----+
Staff	107391
Senior Staff	92853
Technique Leader	15159
Manager	24
+-----+-----+
4 rows in set (0.63 sec)

mysql>

test_db-master.zip

Terminal

```
Terminal Shell Edit View Window Help
htdocs — mysql -uroot -px — 178x49

2018-05-14T23:55:50.393051Z 0 [System] [MY-010910] [Server] /usr/local/mysql/bin/mysqld: Shutdown complete (mysqld 8.0.11) MySQL Community Server - GPL.
Roberts-MacBook-Pro:htdocs robertjamesmetcalfe$ /usr/local/mysql/bin/mysqld -user=root
mysqld: Can't change dir to '/usr/local/mysql-8.0.11-macos10.13-x86_64/data/' (OS errno 13 - Permission denied)
2018-05-14T23:56:19.753497Z 0 [System] [MY-010116] [Server] /usr/local/mysql/bin/mysqld (mysqld 8.0.11) starting as process 29625
2018-05-14T23:56:19.809987Z 0 [Warning] [MY-010091] [Server] Can't create test file /usr/local/mysql-8.0.11-macos10.13-x86_64/data/Roberts-MacBook-Pro.lower-test
2018-05-14T23:56:19.810023Z 0 [Warning] [MY-010159] [Server] Setting lower_case_table_names=2 because file system for /usr/local/mysql-8.0.11-macos10.13-x86_64/data/ is case insensitive
2018-05-14T23:56:19.914011Z 0 [Warning] [MY-010122] [Server] One can only use the --user switch if running as root
2018-05-14T23:56:19.914145Z 0 [ERROR] [MY-010172] [Server] failed to set datadir to /usr/local/mysql-8.0.11-macos10.13-x86_64/data/
2018-05-14T23:56:19.914174Z 0 [ERROR] [MY-010119] [Server] Aborting
2018-05-14T23:56:19.914485Z 0 [System] [MY-010910] [Server] /usr/local/mysql/bin/mysqld: Shutdown complete (mysqld 8.0.11) MySQL Community Server - GPL.
Roberts-MacBook-Pro:htdocs robertjamesmetcalfe$ /usr/local/mysql/bin/mysql -uroot
ERROR 1045 (28000): Access denied for user 'root'@'localhost' (using password: NO)
Roberts-MacBook-Pro:htdocs robertjamesmetcalfe$ /usr/local/mysql/bin/mysql -uroot -p
mysql: [Warning] Using a password on the command line interface can be insecure.
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 10
Server version: 8.0.11 MySQL Community Server - GPL

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> CREATE TABLE IF NOT EXISTS `exceldata` (
->   ->   `id` BIGINT NOT NULL AUTO_INCREMENT PRIMARY KEY,
->   ->   `fname` VARCHAR(100),
->   ->   `mobile` CHAR(10),
->   ->   `email` VARCHAR(100)
->   -> );
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near '->   `id` BIGINT NOT NU
LL AUTO_INCREMENT PRIMARY KEY,
->   `fname` VARCHAR(1' at line 2
mysql> CREATE TABLE IF NOT EXISTS `exceldata` (      `id` BIGINT NOT NULL AUTO_INCREMENT PRIMARY KEY,      `fname` VARCHAR(100),      `mobile` CHAR(10),      `email` VARC
HAR(100)      );
ERROR 1046 (3D000): No database selected
mysql> create database testing;
Query OK, 1 row affected (0.77 sec)

mysql> use `testing`;
Database changed
mysql> CREATE TABLE IF NOT EXISTS `exceldata` (      `id` BIGINT NOT NULL AUTO_INCREMENT PRIMARY KEY,      `fname` VARCHAR(100),      `mobile` CHAR(10),      `email` VARC
HAR(100)      );
Query OK, 0 rows affected (0.62 sec)

mysql>
```



```
Terminal Shell Edit View Window Help
htdocs — -bash — 178x49

[mysql> CREATE TABLE IF NOT EXISTS `exceldata` (
  `id` BIGINT NOT NULL AUTO_INCREMENT PRIMARY KEY,
  `fname` VARCHAR(100),
  `mobile` CHAR(10),
  `email` VARCHAR(100)
);
Query OK, 0 rows affected (0.62 sec)

[mysql> exit
Bye
Roberts-MacBook-Pro:htdocs robertjamesmetcalfe$ javac -d . -cp /Applications/MAMP/htdocs/mysql-connector-java-8.0.11/mysql-connector-java-8.0.11.jar RunSql.java
Roberts-MacBook-Pro:htdocs robertjamesmetcalfe$ java -Djdbc.drivers=com.mysql.jdbc.Driver -cp ./Applications/MAMP/htdocs/mysql-connector-java-8.0.11/mysql-connector-java-8.0.11.jar RunSql
Unrecognized option: -cp.
Error: Could not create the Java Virtual Machine.
Error: A fatal exception has occurred. Program will exit.
/Applications/MAMP/htdocs/mysql-connector-java-8.0.11/mysql-connector-java-8.0.11.jar: line 1: PK: command not found
/Applications/MAMP/htdocs/mysql-connector-java-8.0.11/mysql-connector-java-8.0.11.jar: line 2:8yL: command not found
/Applications/MAMP/htdocs/mysql-connector-java-8.0.11/mysql-connector-java-8.0.11.jar: line 3: syntax error near unexpected token `)'
/Applications/MAMP/htdocs/mysql-connector-java-8.0.11/mysql-connector-java-8.0.11.jar: line 3:8yL?W??i?
META-INF/MANIFEST.MF?VMo?0
?0r?4Z?????;?X??;
??8?d.???#m?g??-!)J|?d?Z;?!?IT?
?
1?{WY?r?vm????w?XM????4?}?????;???w?`1???]?8_-`
Roberts-MacBook-Pro:htdocs robertjamesmetcalfe$ java -Djdbc.drivers=com.mysql.jdbc.Driver RunSql

Exception: com.mysql.jdbc.Driver
Roberts-MacBook-Pro:htdocs robertjamesmetcalfe$
Roberts-MacBook-Pro:htdocs robertjamesmetcalfe$ java -Djdbc.drivers=com.mysql.jdbc.Driver RunSql
Exception: com.mysql.jdbc.Driver
Roberts-MacBook-Pro:htdocs robertjamesmetcalfe$ javac -d . -cp /Applications/MAMP/htdocs/mysql-connector-java-8.0.11/mysql-connector-java-8.0.11.jar RunSql.java
Roberts-MacBook-Pro:htdocs robertjamesmetcalfe$ java -Djdbc.drivers=com.mysql.jdbc.Driver RunSql
Exception: com.mysql.jdbc.Driver
Roberts-MacBook-Pro:htdocs robertjamesmetcalfe$ ls *.jar
mysql-connector-java-8.0.11.jar
Roberts-MacBook-Pro:htdocs robertjamesmetcalfe$ rm *.jar
Roberts-MacBook-Pro:htdocs robertjamesmetcalfe$ javac -d . -cp /Applications/MAMP/htdocs/mysql-connector-java-8.0.11/mysql-connector-java-8.0.11.jar RunSql.java
Roberts-MacBook-Pro:htdocs robertjamesmetcalfe$ java -Djdbc.drivers=com.mysql.jdbc.Driver RunSql
Exception: com.mysql.jdbc.Driver
Roberts-MacBook-Pro:htdocs robertjamesmetcalfe$ ls web_inf
ls: web_inf: No such file or directory
Roberts-MacBook-Pro:htdocs robertjamesmetcalfe$ echo $CLASSPATH

Roberts-MacBook-Pro:htdocs robertjamesmetcalfe$ javac -d . -cp /Applications/MAMP/htdocs/mysql-connector-java-8.0.11/mysql-connector-java-8.0.11.jar RunSql.java
javac: invalid flag: -d.
Usage: javac <options> <source files>
use --help for a list of possible options
Roberts-MacBook-Pro:htdocs robertjamesmetcalfe$ javac -d . -cp /Applications/MAMP/htdocs/mysql-connector-java-8.0.11/mysql-connector-java-8.0.11.jar RunSql.java
Roberts-MacBook-Pro:htdocs robertjamesmetcalfe$ java -Djdbc.drivers=com.mysql.jdbc.Driver -cp /Applications/MAMP/htdocs/mysql-connector-java-8.0.11/mysql-connector-java-8.0.11.jar RunSql
> select * from exceldata
>
Query OK, 0 rows affected (0.62 sec)
```

```
Terminal Shell Edit View Window Help
htdocs — 178x49
ls: web inf: No such file or directory
htdocs — -bash — 178x46

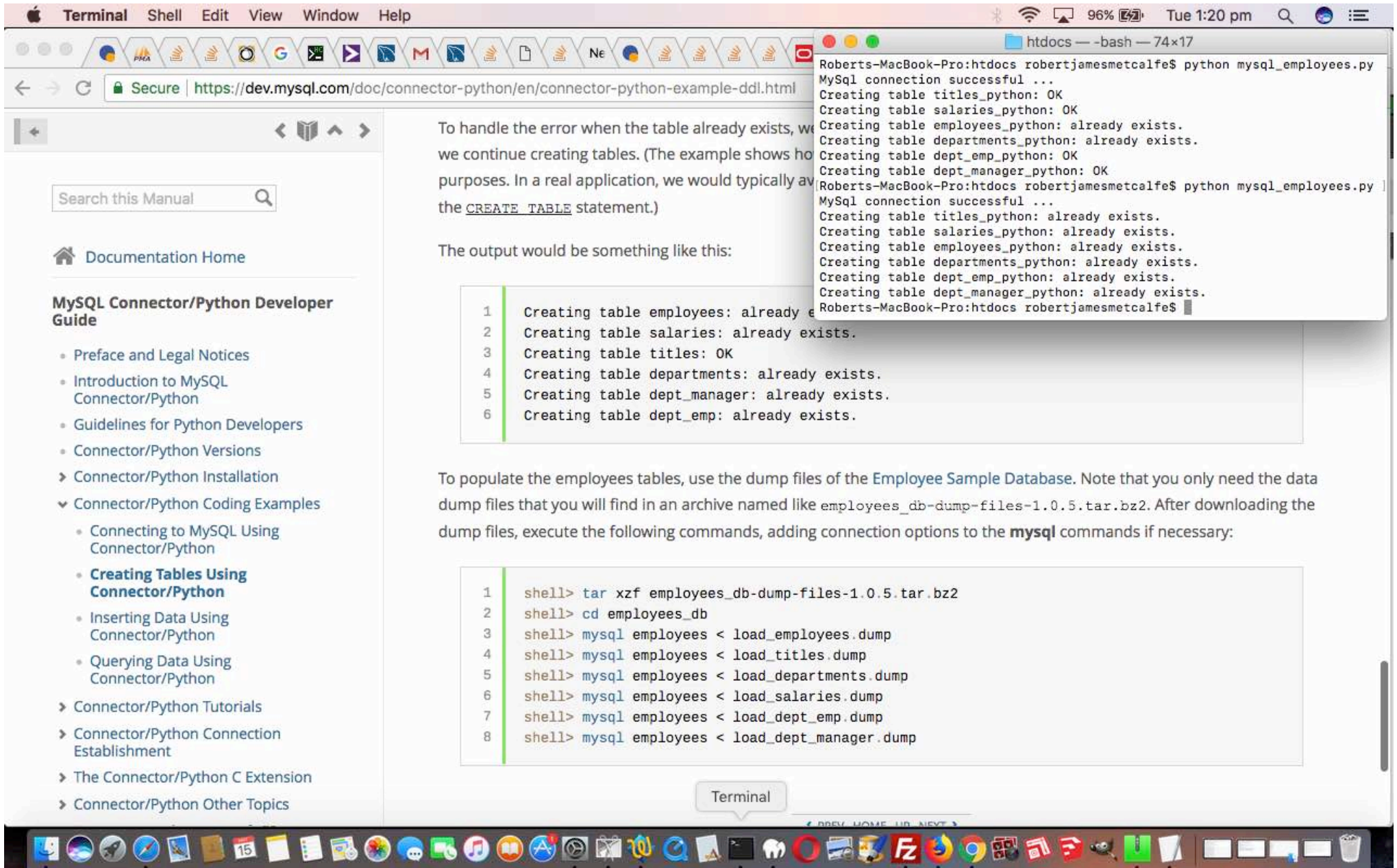
File "mysqlpy.py", line 1, in <module>
    import mysql.connector
ImportError: No module named mysql.connector
Roberts-MacBook-Pro:htdocs robertjamesmetcalfe$ python3 mysqlpy.py
Traceback (most recent call last):
  File "mysqlpy.py", line 1, in <module>
    import mysql.connector
ModuleNotFoundError: No module named 'mysql'
Roberts-MacBook-Pro:htdocs robertjamesmetcalfe$ pip install mysql-connector-python-rf
Collecting mysql-connector-python-rf
  Downloading https://files.pythonhosted.org/packages/21/79/2ff01ab7aa08db3a16b70b990c579c1024c6b2a734263cc7513a758867de/mysql-connector-python-rf-2.2.2.tar.gz (11.9MB)
    100% |#####| 11.9MB 544kB/s
Building wheels for collected packages: mysql-connector-python-rf
  Running setup.py bdist_wheel for mysql-connector-python-rf ... done
  Stored in directory: /Users/robertjamesmetcalfe/Library/Caches/pip/wheels/87/58/fb/d95c84fad7e1bebfed324c13e107ebb08e1997c9226532859a
Successfully built mysql-connector-python-rf
matplotlib 1.3.1 requires nose, which is not installed.
matplotlib 1.3.1 requires tornado, which is not installed.
Installing collected packages: mysql-connector-python-rf
Could not install packages due to an EnvironmentError: [Errno 13] Permission denied: '/Library/Python/2.7/site-packages/mysql_connector_python_rf-2.2.2.dist-info'
Consider using the '--user' option or check the permissions.

Roberts-MacBook-Pro:htdocs robertjamesmetcalfe$ pip --user root install mysql-connector-python-rf
Usage:
  pip <command> [options]

no such option: --user
Roberts-MacBook-Pro:htdocs robertjamesmetcalfe$ sudo pip --user root install mysql-connector-python-rf
Usage:
  pip <command> [options]

no such option: --user
Roberts-MacBook-Pro:htdocs robertjamesmetcalfe$ sudo pip install mysql-connector-python-rf
The directory '/Users/robertjamesmetcalfe/Library/Caches/pip/http' or its parent directory is not owned by the current user and the cache has been disabled. Please check the permissions and owner of that directory. If executing pip with sudo, you may want sudo's -H flag.
The directory '/Users/robertjamesmetcalfe/Library/Caches/pip' or its parent directory is not owned by the current user and caching wheels has been disabled. check the permissions and owner of that directory. If executing pip with sudo, you may want sudo's -H flag.
Collecting mysql-connector-python-rf
matplotlib 1.3.1 requires nose, which is not installed.
matplotlib 1.3.1 requires tornado, which is not installed.
Installing collected packages: mysql-connector-python-rf
Successfully installed mysql-connector-python-rf-2.2.2
Roberts-MacBook-Pro:htdocs robertjamesmetcalfe$ python mysqlpy.py
Roberts-MacBook-Pro:htdocs robertjamesmetcalfe$

" RunSql
> select * from exceldata
```

Terminal Shell Edit View Window Help

htdocs — -bash — 74x25

Roberts-MacBook-Pro:htdocs robertjamesmetcalfe\$ python mysql_employees.py
MySQL connection successful ...
Creating table titles_python: OK
Creating table salaries_python: OK
Creating table employees_python: already exists.
Creating table departments_python: already exists.
Creating table dept_emp_python: OK
Creating table dept_manager_python: OK
Roberts-MacBook-Pro:htdocs robertjamesmetcalfe\$ python mysql_employees.py
MySQL connection successful ...
Creating table titles_python: already exists.
Creating table salaries_python: already exists.
Creating table employees_python: already exists.
Creating table departments_python: already exists.
Creating table dept_emp_python: already exists.
Creating table dept_manager_python: already exists.
Roberts-MacBook-Pro:htdocs robertjamesmetcalfe\$ python mysql_employees.py
MySQL connection successful ...
Creating table employees: OK
Creating table salaries: OK
Creating table titles: OK
Creating table departments: OK
Creating table dept_manager: OK
Creating table dept_emp: OK
Roberts-MacBook-Pro:htdocs robertjamesmetcalfe\$

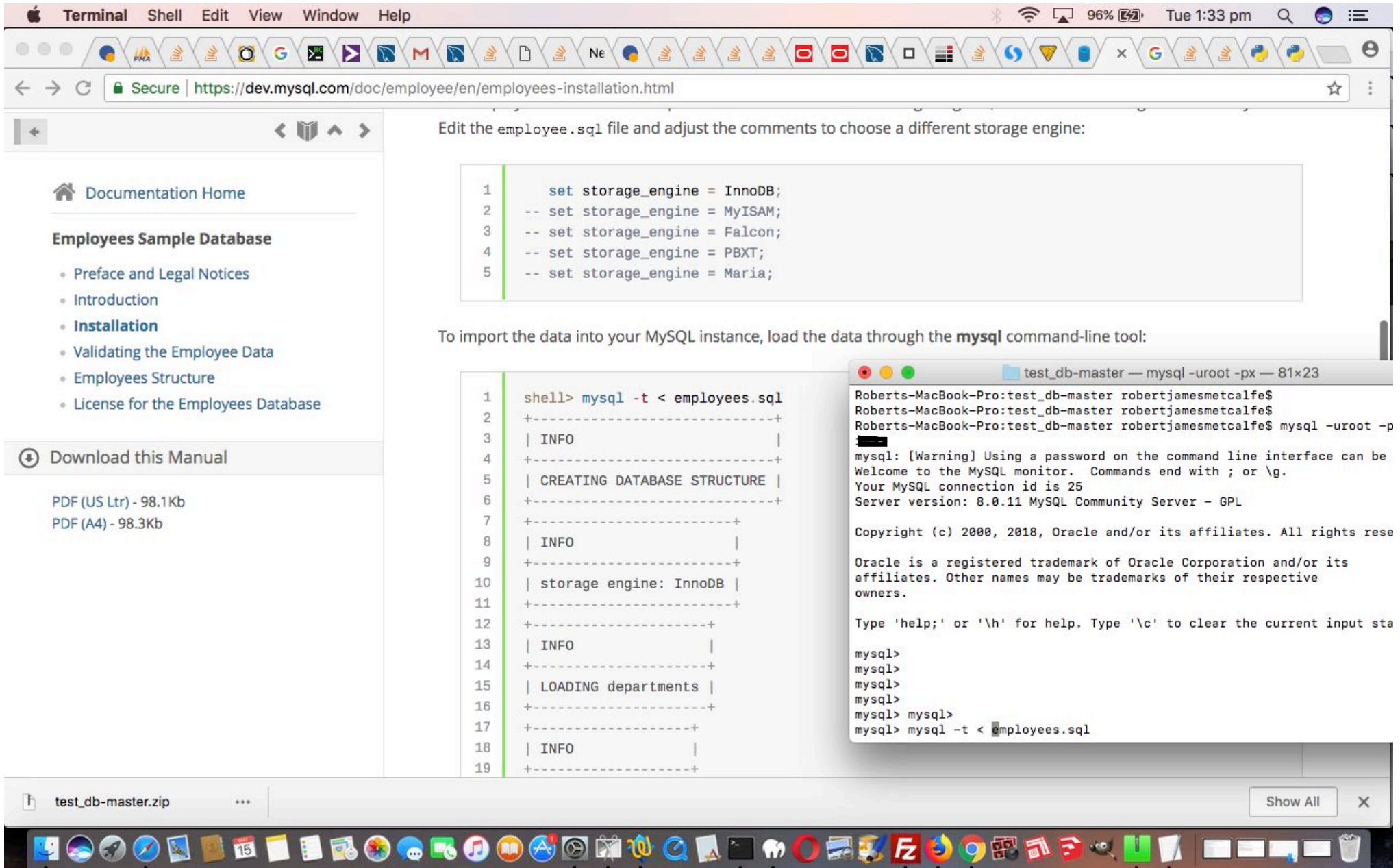
GitHub, Inc. [US] | https://github.com/datacharmer/test_db

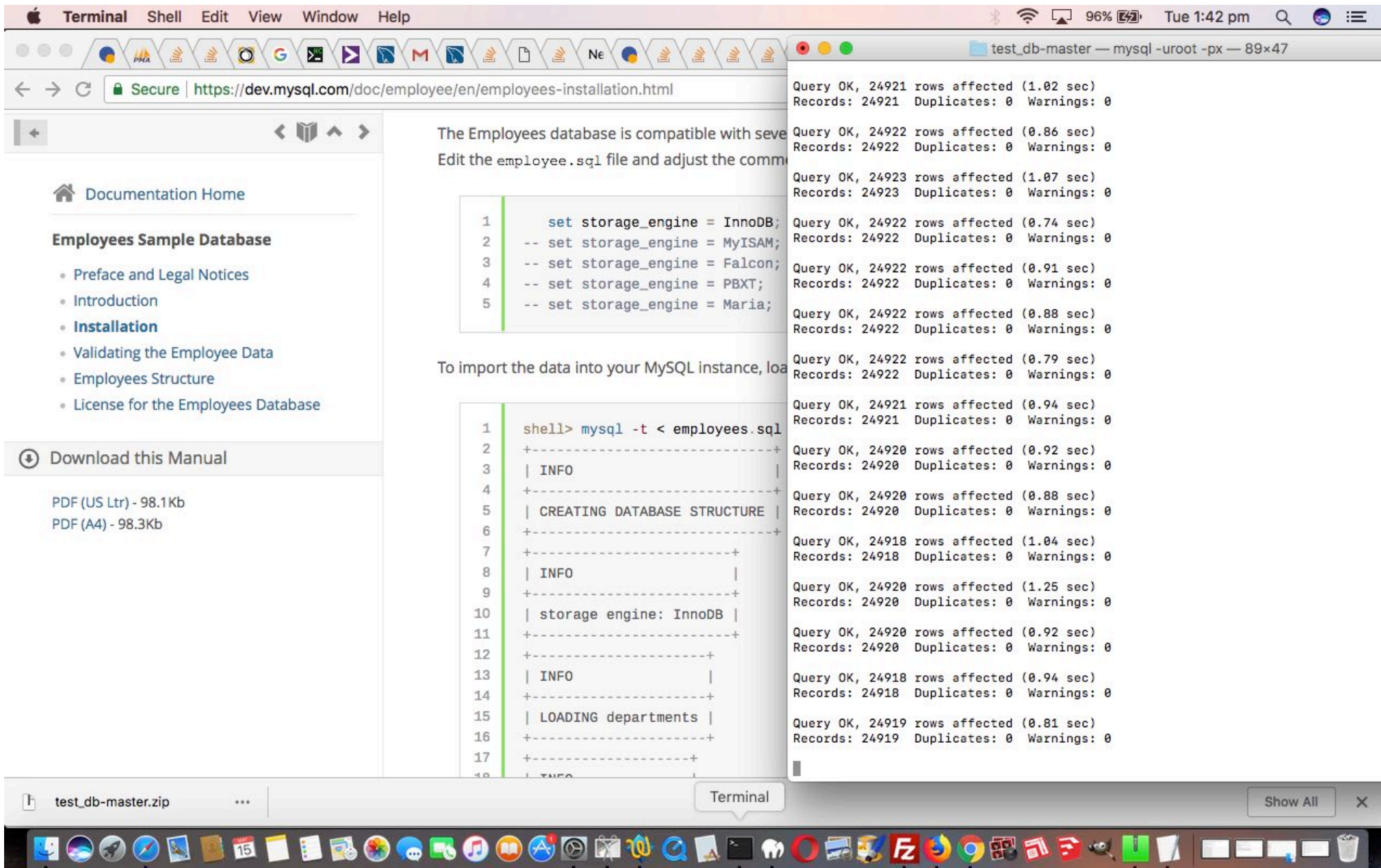
Branch: master ▾ New pull request

datacharmer Merge pull request #8 from tedwa5/master ...

images	Initial deployment	
sakila	Add description for Sakila data	
Changelog	Initial deployment	
README.md	Update README.md	
employees.sql	Added missing semicolon	
employees_partitioned.sql	Added missing semicolon	
employees_partitioned_5.1.sql	Added missing semicolon	3 years ago
load_departments.dump	Made load files editor-friendly	3 years ago
load_dept_emp.dump	Made load files editor-friendly	3 years ago
load_dept_manager.dump	Made load files editor-friendly	3 years ago
load_employees.dump	Made load files editor-friendly	3 years ago
load_salaries1.dump	Made load files editor-friendly	3 years ago
load_salaries2.dump	Made load files editor-friendly	3 years ago
load_salaries3.dump	Made load files editor-friendly	3 years ago
load_titles.dump	Made load files editor-friendly	3 years ago

test_db-master.zip ... Show All X





TerminalShellEditViewWindowHelp

test_db-master — mysql -uroot -px — 61x47

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You can validate the Employee data using two methods, md5 and sha. Two SQL scripts are provided for this purpose, test_employees_sha.sql and test_employees_md5.sql. To run the tests, use **mysql**:

```
1  shell>time mysql -t < test_employees_sha.sql
2  +-----+
3  | INFO
4  +-----+
5  | TESTING INSTALLATION |
6  +-----+
7  +-----+
8  | table_name | expected_records | expected_crc
9  +-----+
10 | employees  | 300024           | 4d4aa689914d8fd41db7e
11 | departments| 9                | 4b315afa0e35ca6649df6
12 | dept_manager| 24              | 9687a7d6f93ca8847388e
13 | dept_emp   | 331603           | f16f6ce609d032d6b1b34
14 | titles     | 443308           | d12d5f746b88f07e69b9e
15 | salaries   | 2844047          | b5a1785c27d75e33a4173
16 +-----+
17 +-----+
18 | table_name | found_records    | found_crc
19 +-----+
20 | employees  | 300024           | 4d4aa689914d8fd41db7e
21 | departments| 9                | 4b315afa0e35ca6649df6
22 | dept_manager| 24              | 9687a7d6f93ca8847388e
23 | dept_emp   | 331603           | f16f6ce609d032d6b1b34
24 | titles     | 443308           | d12d5f746b88f07e69b9e
25 | salaries   | 2844047          | b5a1785c27d75e33a4173
26 +-----+
27 +-----+
```

Query OK, 24922 rows affected (0.73 sec)
Records: 24922 Duplicates: 0 Warnings: 0

Query OK, 24919 rows affected (0.83 sec)
Records: 24919 Duplicates: 0 Warnings: 0

Query OK, 24918 rows affected (0.82 sec)
Records: 24918 Duplicates: 0 Warnings: 0

Query OK, 24921 rows affected (0.77 sec)
Records: 24921 Duplicates: 0 Warnings: 0

Query OK, 24922 rows affected (0.86 sec)
Records: 24922 Duplicates: 0 Warnings: 0

Query OK, 24918 rows affected (0.75 sec)
Records: 24918 Duplicates: 0 Warnings: 0

Query OK, 24923 rows affected (1.05 sec)
Records: 24923 Duplicates: 0 Warnings: 0

Query OK, 24924 rows affected (0.75 sec)
Records: 24924 Duplicates: 0 Warnings: 0

Query OK, 24920 rows affected (0.66 sec)
Records: 24920 Duplicates: 0 Warnings: 0

Query OK, 24920 rows affected (1.28 sec)
Records: 24920 Duplicates: 0 Warnings: 0

Query OK, 24919 rows affected (0.90 sec)
Records: 24919 Duplicates: 0 Warnings: 0

Query OK, 7671 rows affected (0.38 sec)
Records: 7671 Duplicates: 0 Warnings: 0

mysql>
mysql> source show_elapsed.sql ;
+-----+
| data_load_time_diff |
+-----+
| NULL |
+-----+
1 row in set (1.65 sec)

mysql> time mysql -t < test_employees_sha.sql

test_db-master.zip

Show All X

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Employees Sample Database / Employees Structure

5 Employees Structure

The following diagram provides an overview of the structure of the Employees sample database.

Figure 1 The Employees Schema

test_db-master — mysql -uroot -px — 67x50

mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
mysql> select count(*) from employees;
+-----+
| count(*) |
+-----+
| 300024 |
+-----+
1 row in set (0.04 sec)

mysql> select count(*) from dept_emp;
+-----+
| count(*) |
+-----+
| 331603 |
+-----+
1 row in set (0.05 sec)

mysql> select count(*) from employees e, dept_emp d where e.emp_no=d.emp_no;
+-----+
| count(*) |
+-----+
| 331603 |
+-----+
1 row in set (0.66 sec)

mysql> select t.title,count(*) from employees e, titles t where e.emp_no=t.emp_no and t.title not like '%Engineer%' group by t.title;
+-----+-----+
| title | count(*) |
+-----+-----+
Staff	107391
Senior Staff	92853
Technique Leader	15159
Manager	24
+-----+-----+
4 rows in set (0.63 sec)

mysql>

test_db-master.zip

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