MySQL on Mac w/ Python

This is a how-to on installing [MySQL](), creating a simple database, and interacting with it through [Python]().

Create a MySQL database from a .CSV file

The .CSV is exported from [pioneers.computer](). It is based on the [Wikipedia]() [list of pioneers in computer science](). Here are the steps to follow:

- Install [MySQL]() (I use [Homebrew]()).

`dcp:~/work/mysql-example$` `brew install mysql # already installed!`

```
Warning: mysql 8.0.21 is already installed and up-to-date
To reinstall 8.0.21, run `brew reinstall mysql`
```

- Start the [MySQL]() server.

`dcp:~/work/mysql-example$` `mysql.server start`

```
Starting MySQL
.. SUCCESS!
```

- Create the `'mysql'@'localhost'` user, granting all privileges.

`dcp:~/work/mysql-example$` `sudo mysql`
`Password:`

```
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 9
Server version: 8.0.21 Homebrew

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owners.

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

mysql> CREATE USER 'mysql'@'localhost' IDENTIFIED BY 'mysql';
Query OK, 0 rows affected (0.01 sec)

mysql> GRANT ALL PRIVILEGES ON *.* TO 'mysql'@'localhost';
Query OK, 0 rows affected (0.01 sec)

mysql> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.00 sec)
```

- Include a `~/.my.cnf` file so that `LOAD DATA INFILE` will work.

`dcp:~/work/mysql-example$` `cat ~/.my.cnf`

```
[mysqld]
secure_file_priv    = ''
```

- Create the database, table, and load the .CSV data w/ the following .SQL file.

`dcp:~/work/mysql-example$` `cat src/mysql.sql`

```
CREATE DATABASE IF NOT EXISTS test;
USE test;

DROP TABLE IF EXISTS pioneers;
CREATE TABLE pioneers (
    last_name VARCHAR(255) NOT NULL,
    first_name VARCHAR(255) NULL,
    gender CHAR(1) NOT NULL,
    first_year SMALLINT NOT NULL,
    email_school VARCHAR(255) NOT NULL,
    email_gmail VARCHAR(255) NOT NULL
);

LOAD DATA INFILE '~/work/mysql-example/data/pioneers.computer.csv'
    INTO TABLE pioneers
    FIELDS TERMINATED BY ','
    ENCLOSED BY '"'
    LINES TERMINATED BY '\r\n'
    IGNORE 1 ROWS;

SHOW TABLES;
SHOW COLUMNS FROM pioneers;
SELECT * FROM pioneers WHERE gender = "F";
```

`dcp:~/work/mysql-example$` `cat data/pioneers.computer.csv`

```
First,Last,Gender,Year1,E-mail,G-Mail
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Andrew,Yao,M,2000,AndrewYao@pioneers.computer,"""Andrew Yao"" <AndrewYao@p
ioneers.computer>,"
Konrad,Zuse,M,1938,KonradZuse@pioneers.computer,"""Konrad Zuse"" <KonradZu
se@pioneers.computer>,"
```

dcp:~/work/mysql-example$ mysql -u mysql -p < src/mysql.sql
Enter password:

```
Tables_in_test
pioneers
Field   Type    Null    Key Default Extra
first_name  varchar(255)    YES     NULL
last_name   varchar(255)    NO      NULL
gender  char(1) NO      NULL
first_year  smallint    NO      NULL
email_school    varchar(255)    NO      NULL
email_gmail varchar(255)    NO      NULL
```

```
first_name  last_name   gender  first_year  email_school     email_gmail
Frances Allen    F   1970     FrancesAllen@pioneers.computer  "Frances Allen
" <FrancesAllen@pioneers.computer>,
Kathleen    Booth   F   1947     KathleenBooth@pioneers.computer "Kathleen
Booth" <KathleenBooth@pioneers.computer>,
Lynn    Conway  F   1971     LynnConway@pioneers.computer    "Lynn Conway"
<LynnConway@pioneers.computer>,
Elizabeth   Feinler  F   1974     ElizabethFeinler@pioneers.computer  "Eliza
beth Feinler" <ElizabethFeinler@pioneers.computer>,
Sally    Floyd   F   1994     SallyFloyd@pioneers.computer    "Sally Floyd"
<SallyFloyd@pioneers.computer>,
Shafi   Goldwasser F   1989     ShafiGoldwasser@pioneers.computer   "Shafi
 Goldwasser" <ShafiGoldwasser@pioneers.computer>,
Susan    Graham  F   2011     SusanGraham@pioneers.computer   "Susan Graham"
 <SusanGraham@pioneers.computer>,
Barbara Grosz    F   1986     BarbaraGrosz@pioneers.computer  "Barbara Grosz
" <BarbaraGrosz@pioneers.computer>,
Margaret    Hamilton    F   1971     MargaretHamilton@pioneers.computer  "M
argaret Hamilton" <MargaretHamilton@pioneers.computer>,
Betty    Holberton   F   1968     BettyHolberton@pioneers.computer    "Betty
 Holberton" <BettyHolberton@pioneers.computer>,
Grace    Hopper  F   1952     GraceHopper@pioneers.computer   "Grace Hopper"
 <GraceHopper@pioneers.computer>,
Barbara Liskov  F   1987     BarbaraLiskov@pioneers.computer "Barbara Lisko
v" <BarbaraLiskov@pioneers.computer>,
Ada Lovelace    F   1852     AdaLovelace@pioneers.computer   "Ada Lovelace"
 <AdaLovelace@pioneers.computer>,
Radia    Perlman F   1985     RadiaPerlman@pioneers.computer  "Radia Perlman
" <RadiaPerlman@pioneers.computer>,
Rózsa    Péter   F   1932     RózsaPéter@pioneers.computer    "Rózsa Péter"
<RózsaPéter@pioneers.computer>,
Rosalind    Picard  F   1995     RosalindPicard@pioneers.computer    "Rosal
ind Picard" <RosalindPicard@pioneers.computer>,
Jean    Sammet  F   1962     JeanSammet@pioneers.computer    "Jean Sammet"
<JeanSammet@pioneers.computer>,
Karen    Spärck Jones    F   1953     KarenSpärckJones@pioneers.computer  "K
aren Spärck Jones" <KarenSpärckJones@pioneers.computer>,
Sophie   Wilson  F   1985     SophieWilson@pioneers.computer  "Sophie Wilson
" <SophieWilson@pioneers.computer>,
```

- Read this link to understand how to export / import a selection as .XML. For example:

```
dcp:~/work/mysql-example$
mysql -u mysql -p --xml -e 'SELECT * FROM test.pioneers WHERE gender = "F";'
Enter password :
```

```xml
<?xml version="1.0"?>

<resultset statement="SELECT * FROM test.pioneers WHERE gender = &quot;F&q
uot;" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <row>
    <field name="first_name">Frances</field>
    <field name="last_name">Allen</field>
    <field name="gender">F</field>
    <field name="first_year">1970</field>
    <field name="email_school">FrancesAllen@pioneers.computer</field>
    <field name="email_gmail">&quot;Frances Allen&quot; &lt;FrancesAllen@p
ioneers.computer&gt;,</field>
  </row>

  <row>
    <field name="first_name">Kathleen</field>
    <field name="last_name">Booth</field>
    <field name="gender">F</field>
    <field name="first_year">1947</field>
    <field name="email_school">KathleenBooth@pioneers.computer</field>
    <field name="email_gmail">&quot;Kathleen Booth&quot; &lt;KathleenBooth
@pioneers.computer&gt;,</field>
  </row>

  <row>
    <field name="first_name">Lynn</field>
    <field name="last_name">Conway</field>
    <field name="gender">F</field>
    <field name="first_year">1971</field>
    <field name="email_school">LynnConway@pioneers.computer</field>
    <field name="email_gmail">&quot;Lynn Conway&quot; &lt;LynnConway@pione
ers.computer&gt;,</field>
  </row>

  <row>
    <field name="first_name">Elizabeth</field>
    <field name="last_name">Feinler</field>
    <field name="gender">F</field>
    <field name="first_year">1974</field>
    <field name="email_school">ElizabethFeinler@pioneers.computer</field>
    <field name="email_gmail">&quot;Elizabeth Feinler&quot; &lt;ElizabethF
einler@pioneers.computer&gt;,</field>
  </row>

  <row>
```

```
      <field name="first_name">Sally</field>
      <field name="last_name">Floyd</field>
      <field name="gender">F</field>
      <field name="first_year">1994</field>
      <field name="email_school">SallyFloyd@pioneers.computer</field>
      <field name="email_gmail">&quot;Sally Floyd&quot; &lt;SallyFloyd@pione
ers.computer&gt;,</field>
    </row>

    <row>
      <field name="first_name">Shafi</field>
      <field name="last_name">Goldwasser</field>
      <field name="gender">F</field>
      <field name="first_year">1989</field>
      <field name="email_school">ShafiGoldwasser@pioneers.computer</field>
      <field name="email_gmail">&quot;Shafi Goldwasser&quot; &lt;ShafiGoldwa
sser@pioneers.computer&gt;,</field>
    </row>

    <row>
      <field name="first_name">Susan</field>
      <field name="last_name">Graham</field>
      <field name="gender">F</field>
      <field name="first_year">2011</field>
      <field name="email_school">SusanGraham@pioneers.computer</field>
      <field name="email_gmail">&quot;Susan Graham&quot; &lt;SusanGraham@pio
neers.computer&gt;,</field>
    </row>

    <row>
      <field name="first_name">Barbara</field>
      <field name="last_name">Grosz</field>
      <field name="gender">F</field>
      <field name="first_year">1986</field>
      <field name="email_school">BarbaraGrosz@pioneers.computer</field>
      <field name="email_gmail">&quot;Barbara Grosz&quot; &lt;BarbaraGrosz@p
ioneers.computer&gt;,</field>
    </row>

    <row>
      <field name="first_name">Margaret</field>
      <field name="last_name">Hamilton</field>
      <field name="gender">F</field>
      <field name="first_year">1971</field>
      <field name="email_school">MargaretHamilton@pioneers.computer</field>
```

```
      <field name="email_gmail">&quot;Margaret Hamilton&quot; &lt;MargaretHa
milton@pioneers.computer&gt;,</field>
  </row>

  <row>
    <field name="first_name">Betty</field>
    <field name="last_name">Holberton</field>
    <field name="gender">F</field>
    <field name="first_year">1968</field>
    <field name="email_school">BettyHolberton@pioneers.computer</field>
    <field name="email_gmail">&quot;Betty Holberton&quot; &lt;BettyHolbert
on@pioneers.computer&gt;,</field>
  </row>

  <row>
    <field name="first_name">Grace</field>
    <field name="last_name">Hopper</field>
    <field name="gender">F</field>
    <field name="first_year">1952</field>
    <field name="email_school">GraceHopper@pioneers.computer</field>
    <field name="email_gmail">&quot;Grace Hopper&quot; &lt;GraceHopper@pio
neers.computer&gt;,</field>
  </row>

  <row>
    <field name="first_name">Barbara</field>
    <field name="last_name">Liskov</field>
    <field name="gender">F</field>
    <field name="first_year">1987</field>
    <field name="email_school">BarbaraLiskov@pioneers.computer</field>
    <field name="email_gmail">&quot;Barbara Liskov&quot; &lt;BarbaraLiskov
@pioneers.computer&gt;,</field>
  </row>

  <row>
    <field name="first_name">Ada</field>
    <field name="last_name">Lovelace</field>
    <field name="gender">F</field>
    <field name="first_year">1852</field>
    <field name="email_school">AdaLovelace@pioneers.computer</field>
    <field name="email_gmail">&quot;Ada Lovelace&quot; &lt;AdaLovelace@pio
neers.computer&gt;,</field>
  </row>

  <row>
```

```xml
    <field name="first_name">Radia</field>
    <field name="last_name">Perlman</field>
    <field name="gender">F</field>
    <field name="first_year">1985</field>
    <field name="email_school">RadiaPerlman@pioneers.computer</field>
    <field name="email_gmail">&quot;Radia Perlman&quot; &lt;RadiaPerlman@p
ioneers.computer&gt;,</field>
  </row>

  <row>
    <field name="first_name">Rózsa</field>
    <field name="last_name">Péter</field>
    <field name="gender">F</field>
    <field name="first_year">1932</field>
    <field name="email_school">RózsaPéter@pioneers.computer</field>
    <field name="email_gmail">&quot;Rózsa Péter&quot; &lt;RózsaPéter@pione
ers.computer&gt;,</field>
  </row>

  <row>
    <field name="first_name">Rosalind</field>
    <field name="last_name">Picard</field>
    <field name="gender">F</field>
    <field name="first_year">1995</field>
    <field name="email_school">RosalindPicard@pioneers.computer</field>
    <field name="email_gmail">&quot;Rosalind Picard&quot; &lt;RosalindPica
rd@pioneers.computer&gt;,</field>
  </row>

  <row>
    <field name="first_name">Jean</field>
    <field name="last_name">Sammet</field>
    <field name="gender">F</field>
    <field name="first_year">1962</field>
    <field name="email_school">JeanSammet@pioneers.computer</field>
    <field name="email_gmail">&quot;Jean Sammet&quot; &lt;JeanSammet@pione
ers.computer&gt;,</field>
  </row>

  <row>
    <field name="first_name">Karen</field>
    <field name="last_name">Spärck Jones</field>
    <field name="gender">F</field>
    <field name="first_year">1953</field>
    <field name="email_school">KarenSpärckJones@pioneers.computer</field>
```

```
      <field name="email_gmail">&quot;Karen Spärck Jones&quot; &lt;KarenSpär
ckJones@pioneers.computer&gt;,</field>
    </row>

    <row>
      <field name="first_name">Sophie</field>
      <field name="last_name">Wilson</field>
      <field name="gender">F</field>
      <field name="first_year">1985</field>
      <field name="email_school">SophieWilson@pioneers.computer</field>
      <field name="email_gmail">&quot;Sophie Wilson&quot; &lt;SophieWilson@p
ioneers.computer&gt;,</field>
    </row>
</resultset>
```

- To export / import an entire table (in this case, `test.pioneers`) in .XML (in this case, `data/pioneers.xml`), use the following commands:

```
dcp:~/work/mysql-example$
# These commands assume the test database and the pioneers table already exist.
dcp:~/work/mysql-example$
mysql -u mysql -p --xml -e 'SELECT * FROM test.pioneers;'; > data/pioneers.xml
Enter password :
dcp:~/work/mysql-example$
mysql -u mysql -p test -e 'TRUNCATE pioneers;
> LOAD XML INFILE "~/work/mysql-example/data/pioneers.xml" INTO TABLE pioneers;'
Enter password :
```

- Read this link to understand how to `mysqldump` (in text format) and restore an entire database. For example (in this case, `test`):

```
dcp:~/work/mysql-example$  mysqldump -u mysql -p test > data/test.sql
Enter password :
dcp:~/work/mysql-example$
mysql -u mysql -p test < ~/work/mysql-example/data/test.sql
Enter password :
dcp:~/work/mysql-example$  cat data/test.sql
```

```
-- MySQL dump 10.13  Distrib 8.0.21, for osx10.13 (x86_64)
--
-- Host: localhost    Database: test
-- ------------------------------------------------------
-- Server version       8.0.21
```

```
/*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */;
/*!40101 SET @OLD_CHARACTER_SET_RESULTS=@@CHARACTER_SET_RESULTS */;
/*!40101 SET @OLD_COLLATION_CONNECTION=@@COLLATION_CONNECTION */;
/*!50503 SET NAMES utf8mb4 */;
/*!40103 SET @OLD_TIME_ZONE=@@TIME_ZONE */;
/*!40103 SET TIME_ZONE='+00:00' */;
/*!40014 SET @OLD_UNIQUE_CHECKS=@@UNIQUE_CHECKS, UNIQUE_CHECKS=0 */;
/*!40014 SET @OLD_FOREIGN_KEY_CHECKS=@@FOREIGN_KEY_CHECKS, FOREIGN_KEY_CHE
CKS=0 */;
/*!40101 SET @OLD_SQL_MODE=@@SQL_MODE, SQL_MODE='NO_AUTO_VALUE_ON_ZERO' */
;
/*!40111 SET @OLD_SQL_NOTES=@@SQL_NOTES, SQL_NOTES=0 */;


--
-- Table structure for table `pioneers`
--

DROP TABLE IF EXISTS `pioneers`;
/*!40101 SET @saved_cs_client     = @@character_set_client */;
/*!50503 SET character_set_client = utf8mb4 */;
CREATE TABLE `pioneers` (
  `first_name` varchar(255) DEFAULT NULL,
  `last_name` varchar(255) NOT NULL,
  `gender` char(1) NOT NULL,
  `first_year` smallint NOT NULL,
  `email_school` varchar(255) NOT NULL,
  `email_gmail` varchar(255) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci;
/*!40101 SET character_set_client = @saved_cs_client */;


--
-- Dumping data for table `pioneers`
--

LOCK TABLES `pioneers` WRITE;
/*!40000 ALTER TABLE `pioneers` DISABLE KEYS */;
# 158 values removed in the interest of brevity
INSERT INTO `pioneers` VALUES ('Leonard','Adleman','M',1977,'LeonardAdlema
n@pioneers.computer','\"Leonard Adleman\" <LeonardAdleman@pioneers.compute
r>,'),[...],('Konrad','Zuse','M',1938,'KonradZuse@pioneers.computer','\"Ko
nrad Zuse\" <KonradZuse@pioneers.computer>,');
/*!40000 ALTER TABLE `pioneers` ENABLE KEYS */;
UNLOCK TABLES;
/*!40103 SET TIME_ZONE=@OLD_TIME_ZONE */;
```

```
/*!40101 SET SQL_MODE=@OLD_SQL_MODE */;
/*!40014 SET FOREIGN_KEY_CHECKS=@OLD_FOREIGN_KEY_CHECKS */;
/*!40014 SET UNIQUE_CHECKS=@OLD_UNIQUE_CHECKS */;
/*!40101 SET CHARACTER_SET_CLIENT=@OLD_CHARACTER_SET_CLIENT */;
/*!40101 SET CHARACTER_SET_RESULTS=@OLD_CHARACTER_SET_RESULTS */;
/*!40101 SET COLLATION_CONNECTION=@OLD_COLLATION_CONNECTION */;
/*!40111 SET SQL_NOTES=@OLD_SQL_NOTES */;


-- Dump completed on 2020-07-26 10:52:19
```

Access a MySQL database through Python

- Add the `mysql-connector-python` through `pip3` .

`dcp:~/work/mysql-example$`
`pip3 install mysql-connector-python # already installed!`

```
Requirement already satisfied: mysql-connector-python in /usr/local/lib/py
thon3.8/site-packages (8.0.21)
Requirement already satisfied: protobuf>=3.0.0 in /usr/local/Cellar/protob
uf/3.12.3/libexec/lib/python3.8/site-packages (from mysql-connector-python
) (3.12.3)
Requirement already satisfied: six>=1.9 in /usr/local/Cellar/protobuf/3.12
.3/libexec/lib/python3.8/site-packages (from protobuf>=3.0.0->mysql-connec
tor-python) (1.15.0)
Requirement already satisfied: setuptools in /usr/local/lib/python3.8/site
-packages (from protobuf>=3.0.0->mysql-connector-python) (49.2.0)
```

- Test MySQL access through the following Python file.

`dcp:~/work/mysql-example$` `cat src/testmysql.py`

```python
#!/usr/bin/env python3
#
# testmysql.py
#
# pip3 install mysql-connector-python
#

import mysql.connector

config = {
    'user': 'mysql',
    'password': 'mysql',
    'host': '127.0.0.1',
    'database': 'test',
}
cnx = mysql.connector.connect(**config)
cursor = cnx.cursor()
cursor.execute('SELECT * FROM pioneers WHERE gender = "F";')
for record in cursor:
    print(record)
cnx.close()
```

dcp:~/work/mysql-example$ python3 src/testmysql.py

```
('Frances', 'Allen', 'F', 1970, 'FrancesAllen@pioneers.computer', '"France
s Allen" <FrancesAllen@pioneers.computer>,')
('Kathleen', 'Booth', 'F', 1947, 'KathleenBooth@pioneers.computer', '"Kath
leen Booth" <KathleenBooth@pioneers.computer>,')
('Lynn', 'Conway', 'F', 1971, 'LynnConway@pioneers.computer', '"Lynn Conwa
y" <LynnConway@pioneers.computer>,')
('Elizabeth', 'Feinler', 'F', 1974, 'ElizabethFeinler@pioneers.computer',
'"Elizabeth Feinler" <ElizabethFeinler@pioneers.computer>,')
('Sally', 'Floyd', 'F', 1994, 'SallyFloyd@pioneers.computer', '"Sally Floy
d" <SallyFloyd@pioneers.computer>,')
('Shafi', 'Goldwasser', 'F', 1989, 'ShafiGoldwasser@pioneers.computer', '"
Shafi Goldwasser" <ShafiGoldwasser@pioneers.computer>,')
('Susan', 'Graham', 'F', 2011, 'SusanGraham@pioneers.computer', '"Susan Gr
aham" <SusanGraham@pioneers.computer>,')
('Barbara', 'Grosz', 'F', 1986, 'BarbaraGrosz@pioneers.computer', '"Barbar
a Grosz" <BarbaraGrosz@pioneers.computer>,')
('Margaret', 'Hamilton', 'F', 1971, 'MargaretHamilton@pioneers.computer',
'"Margaret Hamilton" <MargaretHamilton@pioneers.computer>,')
('Betty', 'Holberton', 'F', 1968, 'BettyHolberton@pioneers.computer', '"Be
tty Holberton" <BettyHolberton@pioneers.computer>,')
('Grace', 'Hopper', 'F', 1952, 'GraceHopper@pioneers.computer', '"Grace Ho
pper" <GraceHopper@pioneers.computer>,')
('Barbara', 'Liskov', 'F', 1987, 'BarbaraLiskov@pioneers.computer', '"Barb
ara Liskov" <BarbaraLiskov@pioneers.computer>,')
('Ada', 'Lovelace', 'F', 1852, 'AdaLovelace@pioneers.computer', '"Ada Love
lace" <AdaLovelace@pioneers.computer>,')
('Radia', 'Perlman', 'F', 1985, 'RadiaPerlman@pioneers.computer', '"Radia
Perlman" <RadiaPerlman@pioneers.computer>,')
('Rózsa', 'Péter', 'F', 1932, 'RózsaPéter@pioneers.computer', '"Rózsa Péte
r" <RózsaPéter@pioneers.computer>,')
('Rosalind', 'Picard', 'F', 1995, 'RosalindPicard@pioneers.computer', '"Ro
salind Picard" <RosalindPicard@pioneers.computer>,')
('Jean', 'Sammet', 'F', 1962, 'JeanSammet@pioneers.computer', '"Jean Samme
t" <JeanSammet@pioneers.computer>,')
('Karen', 'Spärck Jones', 'F', 1953, 'KarenSpärckJones@pioneers.computer',
 '"Karen Spärck Jones" <KarenSpärckJones@pioneers.computer>,')
('Sophie', 'Wilson', 'F', 1985, 'SophieWilson@pioneers.computer', '"Sophie
 Wilson" <SophieWilson@pioneers.computer>,')
```

Notes

- This how-to assumes:
    - [Mac OS](#) [Homebrew](#) is installed (and `brew upgrade python` has been executed to

get the latest versions of `python3` and `pip3`). There are many other ways to install [Python](#) & [MySQL](#) — this is just the easiest one.

- The `zsh` commands (in green) are executed from `~/work/mysql-example` — which includes the files: `README.md` (this file), `data/pioneers.computer.csv` , `doc/mysql.pdf` , `src/mysql.sql` , `src/testmysql.py` .

- [SQL](#) can be a bit fussy.

  - By convention, SQL commands are in UPPERCASE, other text is in appropriate mixed case.
  - The `LOAD DATA INFILE '~/work/mysql-example/pioneers.computer.csv' ...` command requires an absolute (glob-pattern) path, the proper line termination (in this case `'\r\n'`), no blank / extra lines, and every field present that is marked `NOT NULL` .

- Every `SELECT` in this example ends with `WHERE gender = "F"` , *which is not the entire database*. There are 19 women pioneers out of 160 in this database, which limits the output to one ninth of it's potential total length for the purposes of this document.
- The [Python](#) `mysql.connector` module exists in several versions and it took a bit to find the correct one for Python 3. (Also, *do not name your Python file* `mysql.py` *or you will have trouble importing the* `mysql` *module you expect.*)
- *This test is not secure*.

  - The MySQL user `CREATE USER 'mysql'@'localhost' IDENTIFIED BY 'mysql';` with an easy-to-guess password is a terrible idea.
  - Allowing direct local import of data through a `~/.my.cnf` file is good for local testing, but not secure in a deployed system.
  - Having `'password': 'mysql',` as a key:value pair in the Python code is also not a good idea.

Have fun!

🔗 [permalink](#) and 🔨 [repository](#) for this page.