

# SQL\_on\_jupyter

May 7, 2023

```
[7]: import pandas as pd
import sqlite3
```

```
[8]: !pip install ipython-sql
```

```
Requirement already satisfied: ipython-sql in
c:\users\tommy\appdata\local\programs\python\python311\lib\site-packages (0.5.0)
Requirement already satisfied: prettytable in
c:\users\tommy\appdata\local\programs\python\python311\lib\site-packages (from
ipython-sql) (3.7.0)
Requirement already satisfied: ipython in
c:\users\tommy\appdata\local\programs\python\python311\lib\site-packages (from
ipython-sql) (8.13.2)
Requirement already satisfied: sqlalchemy>=2.0 in
c:\users\tommy\appdata\local\programs\python\python311\lib\site-packages (from
ipython-sql) (2.0.12)
Requirement already satisfied: sqlparse in
c:\users\tommy\appdata\local\programs\python\python311\lib\site-packages (from
ipython-sql) (0.4.4)
Requirement already satisfied: six in
c:\users\tommy\appdata\local\programs\python\python311\lib\site-packages (from
ipython-sql) (1.16.0)
Requirement already satisfied: ipython-genutils in
c:\users\tommy\appdata\local\programs\python\python311\lib\site-packages (from
ipython-sql) (0.2.0)
Requirement already satisfied: typing-extensions>=4.2.0 in
c:\users\tommy\appdata\local\programs\python\python311\lib\site-packages (from
sqlalchemy>=2.0->ipython-sql) (4.5.0)
Requirement already satisfied: greenlet!=0.4.17 in
c:\users\tommy\appdata\local\programs\python\python311\lib\site-packages (from
sqlalchemy>=2.0->ipython-sql) (2.0.2)
Requirement already satisfied: backcall in
c:\users\tommy\appdata\local\programs\python\python311\lib\site-packages (from
ipython->ipython-sql) (0.2.0)
Requirement already satisfied: decorator in
c:\users\tommy\appdata\local\programs\python\python311\lib\site-packages (from
ipython->ipython-sql) (5.1.1)
Requirement already satisfied: jedi>=0.16 in
```

```

c:\users\tommy\appdata\local\programs\python\python311\lib\site-packages (from
ipython->ipython-sql) (0.18.2)
Requirement already satisfied: matplotlib-inline in
c:\users\tommy\appdata\local\programs\python\python311\lib\site-packages (from
ipython->ipython-sql) (0.1.6)
Requirement already satisfied: pickleshare in
c:\users\tommy\appdata\local\programs\python\python311\lib\site-packages (from
ipython->ipython-sql) (0.7.5)
Requirement already satisfied: prompt-toolkit!=3.0.37,<3.1.0,>=3.0.30 in
c:\users\tommy\appdata\local\programs\python\python311\lib\site-packages (from
ipython->ipython-sql) (3.0.38)
Requirement already satisfied: pygments>=2.4.0 in
c:\users\tommy\appdata\local\programs\python\python311\lib\site-packages (from
ipython->ipython-sql) (2.15.1)
Requirement already satisfied: stack-data in
c:\users\tommy\appdata\local\programs\python\python311\lib\site-packages (from
ipython->ipython-sql) (0.6.2)
Requirement already satisfied: traitlets>=5 in
c:\users\tommy\appdata\local\programs\python\python311\lib\site-packages (from
ipython->ipython-sql) (5.9.0)
Requirement already satisfied: colorama in
c:\users\tommy\appdata\local\programs\python\python311\lib\site-packages (from
ipython->ipython-sql) (0.4.6)
Requirement already satisfied: wcwidth in
c:\users\tommy\appdata\local\programs\python\python311\lib\site-packages (from
prettytable->ipython-sql) (0.2.6)
Requirement already satisfied: parso<0.9.0,>=0.8.0 in
c:\users\tommy\appdata\local\programs\python\python311\lib\site-packages (from
jedi>=0.16->ipython->ipython-sql) (0.8.3)
Requirement already satisfied: executing>=1.2.0 in
c:\users\tommy\appdata\local\programs\python\python311\lib\site-packages (from
stack-data->ipython->ipython-sql) (1.2.0)
Requirement already satisfied: asttokens>=2.1.0 in
c:\users\tommy\appdata\local\programs\python\python311\lib\site-packages (from
stack-data->ipython->ipython-sql) (2.2.1)
Requirement already satisfied: pure-eval in
c:\users\tommy\appdata\local\programs\python\python311\lib\site-packages (from
stack-data->ipython->ipython-sql) (0.2.2)

```

```

[9]: df = pd.DataFrame({'name':['Juan', 'Victoria', 'Mary'],
                        'age':[23,34,43],
                        'city':['Miami','Buenos Aires', 'Santiago']})
df

```

```

[9]:
   name  age  city
0   Juan   23  Miami
1 Victoria  34 Buenos Aires

```

```
2      Mary    43      Santiago
```

```
[10]: cnn = sqlite3.connect('jupyter_sql_tutorial.db')
```

```
[17]: df.to_sql('people2',cnn)
```

```
[17]: 3
```

```
[12]: %load_ext sql
```

```
[13]: %sql sqlite:///jupyter_sql_tutorial.db
```

```
[14]: %%sql
```

```
SELECT
*
FROM
people
```

```
* sqlite:///jupyter_sql_tutorial.db
Done.
```

```
[14]: [(0, 'Juan', 23, 'Miami'),
      (1, 'Victoria', 34, 'Buenos Aires'),
      (2, 'Mary', 43, 'Santiago')]
```

```
[15]: %%sql
```

```
SELECT
    count(*)
FROM
    people
```

```
* sqlite:///jupyter_sql_tutorial.db
Done.
```

```
[15]: [(3,)]
```

```
[16]: %%sql
```

```
SELECT
    sum(age) as 'age_sum'
FROM
    people
```

```
* sqlite:///jupyter_sql_tutorial.db
Done.
```

```
[16]: [(100,)]
```