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
```

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

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

[17]: 3

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

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

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

SELECT
    count(*)
FROM
    people
```

    * sqlite:///jupyter_sql_tutorial.db
Done.

[15]: [(3,)]

[16]:
```sql
%%sql

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

    * sqlite:///jupyter_sql_tutorial.db
Done.

[16]: [(100,)]