

Python - Work with SQLite database

Inserting data into table

- Level: Basic

In this example, we demonstrate how Python can be used within MatDeck to work with SQLite databases. First we will use the sqlite3 library to establish a connection to the database with a given name and after that we will insert a single row into table and print all the table data, and then we will insert multiple rows and print all the table data.

Insert into table

The objective is to establish a connection to the SQLite Database, insert data into table called 'Software' and to print all the table data.

```
DatVal := "sqlite_database.db"
```

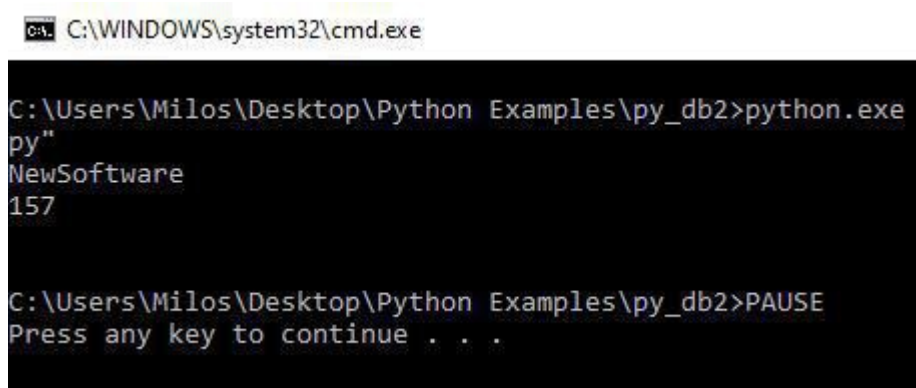
Connection Parameters

Code

```
1 #py
2 import sqlite3
3
4 # Connecting to the server
5 conn = sqlite3.connect(DatVal)
6
7 # Preparing a cursor object
8 cursorObj=conn.cursor()
9
10 # Preparing the query and values to insert into the table (Insert One
11 Row)
12 queryVal="INSERT INTO Software (Name, Number) VALUES
13 ('NewSoftware','157')"
14
15 # Inserting Into the Query (Insert One Row)
16 cursorObj.execute(queryVal)
17 conn.commit()
18
19 # Printing all the data from the table called software after a single row
20 insert
21 tableData=("SELECT * FROM Software")
22 cursorObj.execute(tableData)
23 records = cursorObj.fetchall()
24 for row in records:
25     print(row[0])
26     print(row[1], "\n")
27
28 # Preparing the query and values to insert into the table (Multiple Rows
29 At Once)
30 queryVal = "INSERT INTO Software (Name, Number) VALUES
31 ('NewSoftware', '157'), ('SecondSoftware', '24'), ('ThirdSoftware', '624'),
32 ('MatDeck', '1'), ('OtherSoftwares', '999')"
```

```
28
29 # Inserting Into the Query (Multiple Rows At Once)
30 cursorObj.execute(queryVal)
31 conn.commit()
32
33 # Printing all the data from the table called software after a multiple
rows insert
34 tableData=("SELECT * FROM Software")
35 cursorObj.execute(tableData)
36 records = cursorObj.fetchall()
37 for row in records:
38     print(row[0])
39     print(row[1], "\n")
40
41 # Disconnecting from the server
42 conn.close()
43 ###
```

Output



```
C:\WINDOWS\system32\cmd.exe
C:\Users\Milos\Desktop\Python Examples\py_db2>python.exe
py"
NewSoftware
157

C:\Users\Milos\Desktop\Python Examples\py_db2>PAUSE
Press any key to continue . . .
```