

# 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"
```

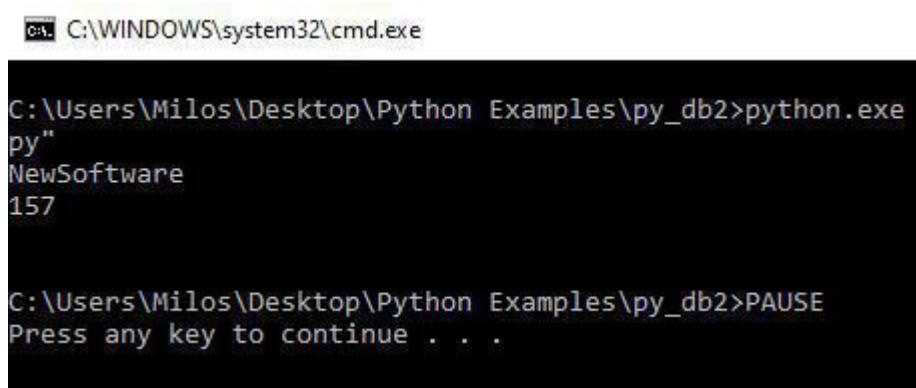
Connection Parameters

## 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 . . .
```