# 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

```
#py
import sqlite3

# Connecting to the server
conn = sqlite3.connect(DatVal)

# Preparing a cursor object
cursorObj=conn.cursor()

 # Preparing the query and values to insert into the table (Insert One Row)
queryVal="INSERT INTO Software (Name, Number) VALUES ('NewSoftware','157')"

# Inserting Into the Query (Insert One Row)
cursorObj.execute(queryVal)
conn.commit()

# Printing all the data from the table called software after a single row insert
tableData=("SELECT * FROM Software")
cursorObj.execute(tableData)
records = cursorObj.fetchall()
for row in records:
        print(row[0])
        print(row[1],"\n")

# Preparing the query and values to insert into the table (Multiple Rows At Once)
queryVal = "INSERT INTO Software (Name, Number) VALUES ('NewSoftware','157'),('SecondSoftware','24'),('ThirdSoftware','624'),('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