Python - Work with MySQL database

Insert data into table

- Level: Basic

In this example, we illustrate how Python can be used within MatDeck to work with MySQL database. First we will use MySQL Connector/Python to establish a connection to database with given name and after that we will insert single row into table and print all table data, after that we will insert multiple rows and print all table data.

Insert into table

The task is to establish the connection to MySQL Database, to insert data into table 'Software' and to print all table data.

```
UserVal := "test_user"
PassVal := "Test123"
HostVal := "localhost"
DatVal := "matdeck"

DVal := "mysql"
PortVal := 3306

Connection Parameters
```

Code

```
#py
import mysql.connector as SQLCON

# Connecting to the server
conn = SQLCON.connect(user = 'test_user',
                      password = 'Test123',
                      host = 'localhost',
                      database= 'matdeck')

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

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

# Insert Into Query (Insert One Row)
cursorObj.execute(queryVal,dataVal)
conn.commit()

# Print all data from Software table after 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 query and values to insert into table (Multiple Rows At Once)
dataVal=[("NewSoftware","157"),
```

```
        ("SecondSoftware","24"),
        ("ThirdSoftware","624"),
        ("MatDeck","1"),
        ("OtherSoftwares","999")]

# Insert Into Query (Multiple Rows At Once)
cursorObj.executemany(queryVal,dataVal)
conn.commit()

# Print all data from Software table after multipple rows insert
tableData=("SELECT * FROM Software")
cursorObj.execute(tableData)
records = cursorObj.fetchall()
for row in records:
        print(row[0])
        print(row[1],"\n")

# Disconnecting from the server
conn.close()
###
```

Output