

Python - Work with MySQL database

Select data from 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 select and print table data.

Select table data

The task is to establish the connection to MySQL Database, to select and print Name column data from table 'Software' at first, and after that to select and print data from table 'Software' where Number column value is bellow 500.

```
UserVal := "test_user"
```

```
PassVal := "Test123"
```

```
HostVal := "localhost"
```

```
DatVal := "matdeck"
```

```
DVal := "mysql"
```

```
PortVal := 3306
```

Connection Parameters

Code

```
1 #py
2 import mysql.connector as SQLCON
3
4 # Connecting to the server
5 conn = SQLCON.connect(user = 'test_user',
6                       password = 'Test123',
7                       host = 'localhost',
8                       database = 'matdeck')
9
10 # Preparing a cursor object
11 cursorObj = conn.cursor()
12
13 print("Displaying Name column from 'Software' table:")
14
15 # Select query and display Name column data
16 cursorObj.execute("SELECT Name FROM Software")
17 records = cursorObj.fetchall()
18 for row in records:
19     print(row)
20
21 print("Displaying data from 'Software' table where Number value is bellow
22 500:")
23
24 # Select query and display all rows where Number value is bellow 500
25 cursorObj.execute("SELECT * FROM Software WHERE Number < 500")
26 records = cursorObj.fetchall()
27 for row in records:
28     print(row)
29
30 # Disconnecting from the server
```

```
30 conn.close()  
31 ###
```

Output

C:\WINDOWS\system32\cmd.exe

```
C:\Users\Milos\Desktop\Python Examples\py_db4>python.exe "C:/Users/Milos  
Displaying Name column from 'Software' table:  
( 'NewSoftware', )  
( 'NewSoftware', )  
( 'SecondSoftware', )  
( 'ThirdSoftware', )  
( 'MatDeck', )  
( 'OtherSoftwares', )  
Displaying data from 'Software' table where Number value is bellow 500:  
( 'NewSoftware', 157 )  
( 'NewSoftware', 157 )  
( 'SecondSoftware', 24 )  
( 'MatDeck', 1 )  
  
C:\Users\Milos\Desktop\Python Examples\py_db4>PAUSE  
Press any key to continue . . .
```