# SɅRɅSWɅTI

## Department of Computer Engineering

**College of Engineering**

SɅRɅSWɅTI

### Experiment 10

###### Aim: Demonstrate Database connectivity

**Resources required:** P-IV and above, Python compiler

###### Theory:

###### Step1: Install python and set the path.

###### Step2: Using any IDE or in terminal write the following command to install mysql connector:

###### 

###### pip install mysql-connector-python

###### or

###### Python -m pip install mysql-connector-python (if upper command doesn’t work)

###### After installing above library we’re ready to use it in our python files

###### (Note: If you create Virtual Environment you need to install it in your Virtual Environment.)

###### Step3: Create a Python file of your desired name(extension: .py)

###### Step4: You need to write following code at the top to import mysql connector:

###### from mysql import connector

###### Step5: Now we need to connect to database using mysql.connector object, for that we have following syntax:

###### 

###### Object\_name = connector.connect( host=“hostname”, username=”db\_username”, password = “user\_password”, database = “db\_name”)

###### Hostname: In our case hostname is local host since we’re not hosting it anywhere

###### db\_username: It is a database username it should exist or else code will raise an error.

###### Password: user password should be correct or code will raise an error.

###### Db\_name: database name which you’re going to use if not exist it will raise an error.

###### Step6: If everything is correct in Step5 we have successfully connected to our database and we can write queries using our Object.

###### 

**Conclusion: We have successfully demonstrate MySQL database connectivity in python.**

**Code:**

from mysql import connector

mydb = connector.connect(

            host = "localhost",

            username = "root",

            password = "admin",

            database = "pythontemp"

        )

mycursor = mydb.cursor()

mycursor.execute("CREATE TABLE IF NOT EXISTS customers(customer\_id INT AUTO\_INCREMENT PRIMARY KEY,name VARCHAR(30))")

mycursor.execute("SHOW TABLES")

print(\*[x for x in mycursor])

try:

    mycursor.execute("ALTER TABLE customers ADD address VARCHAR(255)")

except:

    print("Column already exist")

mycursor.execute("DESC customers")

print(\*[x for x in mycursor])

sql = "INSERT INTO customers(name,address) values(%s,%s)"

val = [

    ("Levi Ackermann","Wall Rose"),

    ("Eren Jaeger","Wall Maria"),

    ("Lalatinna","Konosuba"),

    ("Kaneki Kun","Re"),

    ("Rias Gremory","DxD"),

]

mycursor.executemany(sql,val)

mydb.commit()

print(mycursor.rowcount," was inserted")

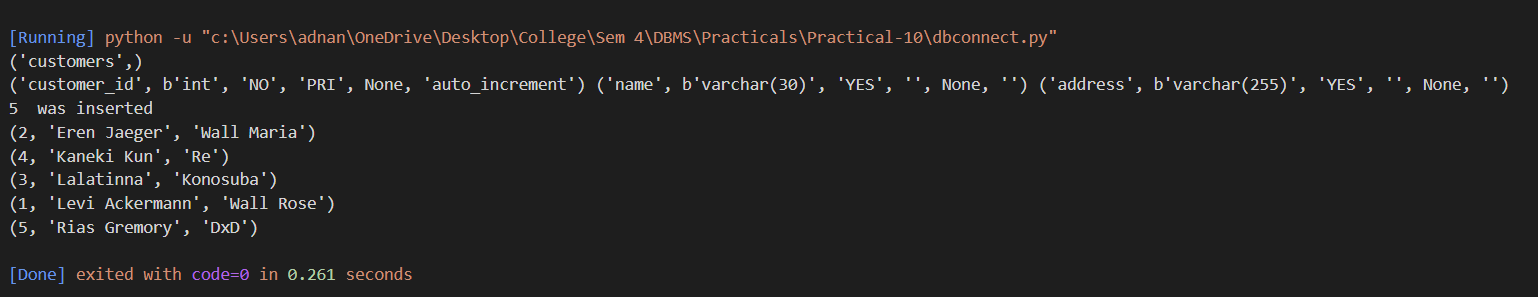
mycursor.execute("SELECT \* FROM customers ORDER BY name")

result = mycursor.fetchall()

for x in result:

    print(x)

**Output:**

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