MYSQL Connections

```
import mysql.connector
conn = mysql.connector.connect(use = 'root', password =
                               'password')
#Creating a cursor object using the cursor() method.
cursor = conn.cursor()
#Executing an MYSQL function using the execute() method.
cursor.execute('SELECT DATABASE()')
#Fetch a single row using fetchone() method.
data = cursor.fetchone()
print("Connection established to:", data)
#Closing the connection.
conn.close()
```

Connection

⊙ You can also establish connection to MySQL by passing credentials (user name, password, hostname, and database name) to connection.MySQLConnection() as shown below —

⊙ from mysql.connector import (connection)

#establishing the connection

conn = connection.MySQLConnection(user='root',
password='password',database='mydb

#closing the connection.

conn.close()

Creating MySQL table using Python

#importing required libraries

import mysql.connector

dataBase = mysql.connector.connect(

host='localhost',

user='user',

password='password',

database='sdg'

)

cursorObject = dataBase.cursor()

studentRecord = """CREATE TABLE STUDENT(

NAME VARCHAR(20) NOT NULL,

BRANCH VARCHAR(50),

ROLL INT NOT NULL,

SECTION VARCHAR(5),

AGE INT

)"""

#table created.

cursorObject.execute(studentRecord)

#disconnecting from server.

dataBase.close()

Insert Data into Tables

```
# importing required libraries.
import mysql.connector
database = mysql.connector.connect(
host = 'localhost',
user = ('user'),
password 2 ('password'),
database = 'gfg',
)
# preparing a cursor object.
cursorObject = database.cursor()
sql = "INSER INTO STUDENT (NAME, BRANCH,
        ROLL, SECTION, AGE) \ VALUES (%s, %s,
        %s, %s, %s)"
val = ("Ram", "CSE", "85", "B", "19")
cursorObject.execute(sql, val)
database.commit()
# disconnecting from server,
database.close()
```

Fetching Data

```
import mysql.connector
database = mysql.connector.connect(
host = 'localhost',
user = (user'),
password = "password",
database = 'gfg')
)
```

```
cursorObject = dataBase.cursor()
query = 'SELECT NAME, ROLL FROM STUDENT'
cursorObject.execute(query)
myresult = cursorObject.fetchall()

for x in myresult
    print(x)

dataBase.close()
```

Where Clause.

```
import mysql.connector
dataBase = mysql.connector.connect(
host = 'localhost',
user = 'user',
passwd = 'password',
database = 'gfg'
)
cursorObject = dataBase.cursor()
query = "SELECT * FROM STUDENT where AGE
                =20"
cursorObject.execute(query)
myresult = cursorObject.fetchall()
for x in myresult:
    print(x)
dataBase.close()
```

Order By clause in MySQL using Python

```
dataBase = mysql.connector.connect (
host = 'localhost',
user = 'root',
password = 'password',
database = 'priya')

cursorObject = dataBase.cursor()
query = "SELECT * FROM STUDENT ORDER BY DESC"
cursorObject.execute(query)
myresult = cursorObject.fetchall()

for x in myresult:
        print(x)
dataBase.close()
```

commit → It is used to set the changes from dataBase..

Update Data

```
dataBase = mysql.connector.connect (
host = 'localhost',
user = 'root',
password = 'password',
database = 'priya')
cursorObject = dataBase.cursor()
query = ("UPDATE STUDENT SET AGE=20 WHERE
                        NAME = 'SHYAM';"
cursorObject.execute(query)
dataBase.commit()

dataBase.close()
```

Delete Data from MySQL table using Python.

```
dataBase = mysql.connector.connect(
host = 'localhost',
user = 'root',
password = 'password',
dataBase = 'priya')

cursorObject = dataBase.cursor()
query = 'DELETE FROM STUDENT where age = 21;'
cursorObject.execute(query)
dataBase.commit()
dataBase.close()
```

Drop Table in MySQL using Python

```
dataBase = mysql.connector.connect(
host = 'localhost',
user = 'root',
password = 'password',
dataBase = 'priya')
cursorObject = dataBase.cursor()
query = 'DROP TABLE STUDENT;'
cursorObject.execute(query)
dataBase.commit()
dataBase.close()
```

```
import mysql.connector
try:
    conn = mysql.connector.connect(host='localhost',
        database='python_db',
        user='root',
        password='password')
    conn.autocommit = False
    cursor = conn.cursor()
    sql_update_query = """Update account_A set
        balance = 1000 where id = 1 """
    cursor.execute(sql_update_query)
    sql_update_query = """Update account_B set
        balance = 1500 where id = 2 """
    cursor.execute(sql_update_query)
    print("Record Updated successfully")
    conn.commit()
except mysql.connector.Error as error:
    print("Failed to update record to database
        rollback: {}".format(error))
    conn.rollback()
finally:
    if conn.is_connected():
        cursor.close()
        conn.close()
        print("connection is closed")
```