Combining SQL with Python

* Database – holds data
* This data can be fetched using python
* Database can be segregated in two forms : SQL & NoSQL
* No SQL means not only SQL
* SQL – Here data is stored in tabular(structured) formatby creating schema, data is almost similar to data in excel file
* NoSQL – Here unstructured data can be stored, without creating a schema
* Time stamp data, graph data(in social media), data for faster search etc… can be stored in NoSQL……..this can be done SQL also, but latency matters

Code in MySQL:

CREATE DATABASE test;

CREATE TABLE t1(x1 VARCHAR(40), x2 INT, x3 VARCHAR(60), X4 VARCHAR(90));

INSERT INTO t1 VALUES('Remya', 33, 'RS', 'e capita');

SELECT \* FROM t1;

CREATE TABLE fsds(student\_name VARCHAR(50),  email\_id VARCHAR(90), phone\_number INT);

INSERT INTO fsds VALUES('Remya', 'remya@1234', 980876);

SELECT \* FROM fsds;

Code in test.py file:

import mysql.connector

remya = mysql.connector.connect(

  host="localhost",

  user="abc",

  password="password"

)

print(remya.is\_connected())

Here remya act as connection variable between mysql and python

Now the command show databases in mysql will show all the databases available….. to see the same result in python also:

First create a cursor in test.py file as shown below :

cur = remya.cursor()

Now to get names of databases :

cur.execute("show databases")

for i in cur:

    print(i)

code to create databases and use it:

cur.execute("create database fsds\_db")

cur.execute("use fsds\_db")

creating table and inserting values into it:

cur.execute("create table fsds1(name varchar(40), roll\_no int, mail\_id varchar(50))");

cur.execute("insert into fsds1 values ('Remya', 98, 'remya@1234')")

when following code is written in mysql file:

use fsds\_db;

select \* from fsds1;

No results are obtained … to solve this issue write following code in test.py file in next line

remya.commit()

code for another file test1.py

import mysql.connector

remya = mysql.connector.connect(

  host="localhost",

  user="abc",

  password="password"

)

print(remya.is\_connected())

cur = remya.cursor()

cur.execute("select \* from fsds\_db.fsds1")

# result is not shown because things are like tuple in tuple

# that is one row of table is taken as tuple and collection of all rows (all tuples) in main tuple (for the table)

# To get those entities use for loop

for i in cur:

    print(i)