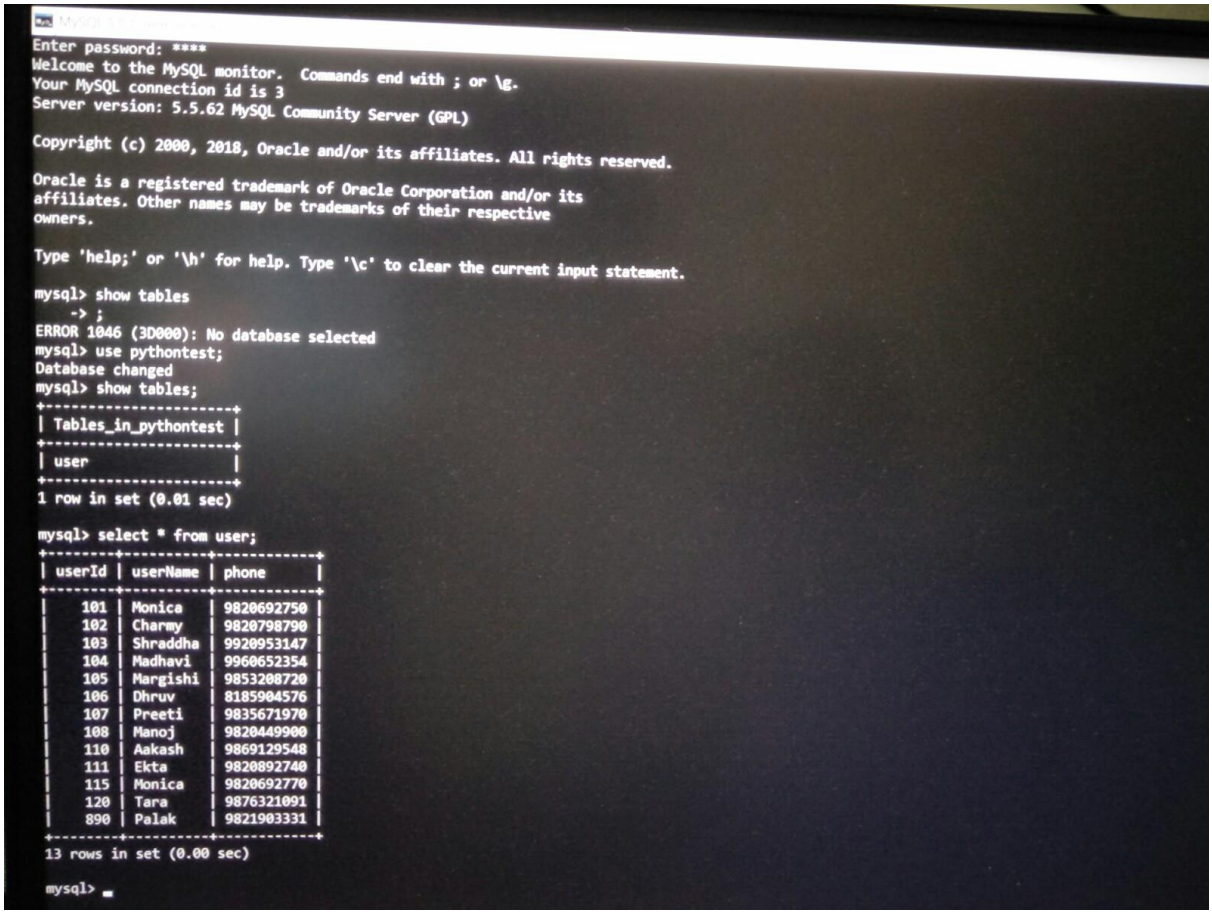
Project Name: SQL Python MySQL

Table of Contents

Demo



Overview

This is diving into Console based Application using MySQL with Python.
SQL is used to communicate with a database. SQL statements are used to perform tasks such as update data on a database, or retrieve data from a database, which is called CRUD Operations.
This repository contains the code for SQL with Python through MySQL Database using python's various libraries.
It used mysql library.
This library helps to perform individually one particular functionality.
MySQL is a relational database management system based on SQL – Structured Query Language. The most common use for MySQL however, is for the purpose of a web database. It can be used to store anything from a single record of information to an entire inventory of available products for an online store.
The purpose of creating this repository is to gain insights into working with database in Python. These python libraries raised knowledge in discovering these libraries with practical use of it.
It leads to growth in my ML repository.
This above few screenshots will help you to understand flow of output.

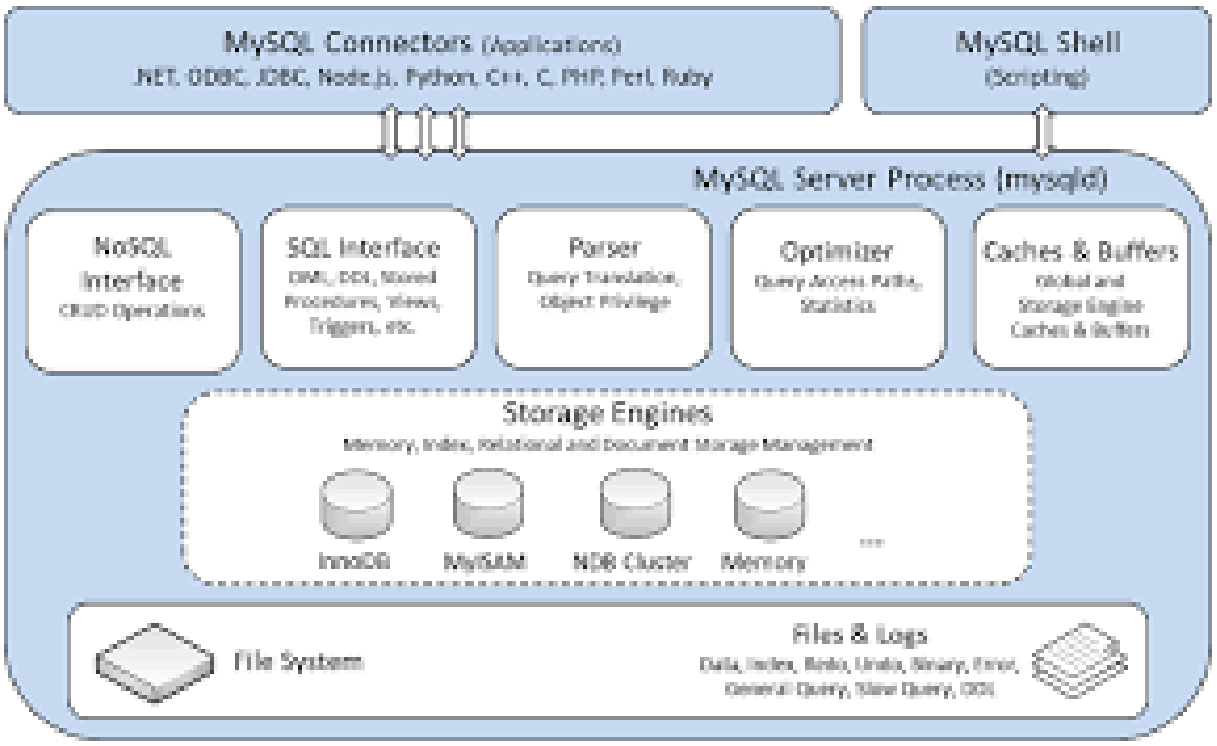
Motivation

The reason behind building this is, I wanted to work with combination of database with python integration. So, MySQL offers advanced features and reliability far beyond a typical freeware project. Another reason is, MySQL database software has been shown to manage memory exceedingly well, and actually prevents memory leaks you might experience on a server where it's not deployed. And that is what big companies wants as they have huge data to store. MySQL is Fast: When compared to other database software like Sybase and Oracle. It gives a good start if you can transfer data quickly from database so that other process also can start doing it as cleaning and analysis etc and not getting delayed in work. In addition to that, it provides Data Security which has become an must take care concern of business and supply on-demand scalability. These are the reason that MySQL has become popular and one of the top choices to work with. Hence, I continue to gain knowledge while practicing the same and spread literary wings in tech-heaven.

Technical Aspect

MySQL comes with the assurance of 24×7 uptime and offers a wide range of high-availability solutions, including specialized cluster servers and master/slave replication configurations. MySQL tops the list of robust transactional database engines available on the market. With an average download and installation time of less than 30 minutes, MySQL means usability from day one. Whether your platform is Linux, Microsoft, Macintosh or UNIX, MySQL is a comprehensive solution with self-management features that automate everything from space expansion and configuration to data design and database administration.

MySQL Architecture:



Installation

Using intel core i5 9th generation with NVIDIA GFORECE GTX1650.
Windows 10 Environment Used.
Already Installed Anaconda Navigator for Python 3.x
The Code is written in Python 3.8.
If you don't have Python installed then please install Anaconda Navigator from its official site.
If you are using a lower version of Python you can upgrade using the pip package, ensuring you have the latest version of pip, *python* -m pip install --*upgrade pip and press Enter*.

Run/How to Use/Steps

Keep your internet connection on while running or accessing files and throughout too.
Follow this when you want to perform from scratch.
Install MySQL.
I am using anaconda prompt and mysql command line client,
you can use with cmd also for that add path to system variables for using pip.
You should know means note down mysql user, pwd, port, host.
Open Anaconda Prompt, Perform the following steps:
cd <PATH>
pip install mysql-connector
pip install mysql-connector-python

pip install dbhelpers

Now, open MySQL ,

mysql>select user from mysql.user;

mysql> show variables; to see port number and all other details

mysql> SHOW VARIABLES WHERE Variable_name = 'port';

mysql>use pythontest;

mysql>show tables;

mysql>desc user;

mysql>select * from user;

mysql>show variables where variable_name='hostname'; [To cross verify]

Open Anaconda Prompt,

cd <PATH> ie cd C:\Users\Monica\MY SQL 5.5 [As I have transferred it after downloading here, mysql-5.5.62-winx64.msi file – You have to give path where you stored it]

mysql -uroot -p [from anaconda prompt]

run .py files. That is,

python dehelper.py

python main.py

You can also create requirement.txt file as, pip freeze > requirements.txt

run files.

Follow this when you want to just perform on local machine.

Download ZIP File.

Right-Click on ZIP file in download section and select Extract file option, which will unzip file.

Move unzip folder to desired folder/location be it D drive or desktop etc.

Open Anaconda Prompt, write cd <PATH> and press Enter.

eg: cd C:\Users\Monica\Desktop\Projects\Python Projects 1\18)Python_with_SQL\Project 2 python+mysql

In Anconda Prompt, pip install -r requirements.txt to install all packages.

In Anconda Prompt, write <filename>.py and press Enter. That is,

In Anconda Prompt, write 1)dehelper.py and press Enter.

In Anconda Prompt, write 2)main.py and press Enter.

Please be careful with spellings or numbers while typing filename and easier is just copy filename and then run it to avoid any silly errors.

Note: cd <PATH>

[Go to Folder where file is. Select the path from top and right-click and select copy option and paste it next to cd one space <path> and press enter, then you can access all files of that folder] [cd means change directory]

Directory Tree/Structure of Project

Folder: 18)Python_with_SQL > Project 2 python+mysql

1)dehelper.py

2)main.py

To Do/Future Scope

Can try another database with more than more tables.

Technologies Used/System Requirements/Tech Stack

Credits

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