Title :- Database Connectivity

Problem Statement :-
Write a program to implement MySQL/Oracle database connectivity with any frontend language to implement database navigations operations (add, delete, edit, etc)

Objective :-
- To insert a record in MySQL database using Java / Php / Python
- To update a record in MySQL database using Java / Php / Python
- To delete a record in MySQL database using Java / Php / Python

S/W and H/W requirement :-
MySQL / Oracle , Windows-10 , 64 bit , 8GB RAM, 512GB SSD.

Theory :-
The following are the steps to connect Python application to MySQL database
1. Import mysql.connector module
2. Create the connection object
3. Create the cursor object
4. Execute the query

Creating connection :-
connect() method of mysql.connector module is used.

pass the database details like Hostname, username, Password and the database to be used. The method returns a connection object.

Creating cursor object

The cursor object can be defined as an abstraction specified in Python db.api 2.0.

It facilitates us to have multiple separate working environments through the same connection to the database. We can create the cursor object by calling the cursor() function of connection object.
The cursor object is an important aspect of executing queries to the database.

Executing SQL commands of CRUD operations.

To perform sql commands on a database from python application, simply pass the query to execute() function of cursor object.

* Note : close the database connection to disconnect from database by calling close() function of connection object.

Conclusion :

Successfully implemented database connectivity using Python and performed CRUD operations on the MySQL database.