Experiment No 13

Aim : Write python programs to understand GUI database connectivity to perform CRUD in python (Use any one database like SQLite, MySQL, Oracle, PostgreSQL etc).

```
# GUI database connectivity to perform CRUD operations in python WITH
MySQL
import mysql.connector
mydb = mysql.connector.connect(
    host='localhost',
    user='root',
    password='Shivam@$12')

print(mydb.connection_id)
# open client open
# mysql> show databases;
mydb = mysql.connector.connect(
    host='localhost',
    user='root',
    password='Shivam@$12')
cur = mydb.cursor()
cur.execute("CREATE DATABASE db1")
# open client open
# mysql > show databases
# create table
mydb = mysql.connector.connect(
    host='localhost',
    user='root',
    password='Shivam@$12',
    database='db1'
)
cur = mydb.cursor()
s = "CREATE TABLE book(bookid integer(4),title varchar(20),price
float(5,2))"
cur.execute(s)
# mysql> use db1;
# mysql> show tables;
```

```
# data insert
# mysql> use db1;
# mysql> show tables;
# mysql> select * from book;
mydb = mysql.connector.connect(
    host='localhost',
    user='root',
    password='Shivam@$12',
    database='db1'
)
cur = mydb.cursor()
s = "INSERT INTO book(bookid,title,price) VALUES(%s,%s,%s)"
b1 = (1, 'Python3', 345)
cur.execute(s, b1)
mydb.commit()
# mysql> select * from book;
mydb = mysql.connector.connect(
    host='localhost',
    user='root',
    password='Shivam@$12',
    database='db1'
)
cur = mydb.cursor()
s = "INSERT INTO book(bookid,title,price) VALUES(%s,%s,%s)"
books = [(2, 'PHP', 135), (3, 'Java8', 450), (4, 'HTML', 200)]
cur.executemany(s, books)
mydb.commit()
# mysql> select * from book;
mydb = mysql.connector.connect(
    host='localhost',
    user='root',
    password='Shivam@$12',
    database='db1'
)
cur = mydb.cursor()
s = "SELECT * from book"
cur.execute(s)
result = cur.fetchall()
for rec in result:
    print(rec)
```

```
# mysql>
mydb = mysql.connector.connect(
    host='localhost',
    user='root',
    password='Shivam@$12',
    database='db1'
)
cur = mydb.cursor()
s = "UPDATE book SET price=price+10 WHERE price>200"
cur.execute(s)
mydb.commit()
# mysql> select * from book;
# delete record
mydb = mysql.connector.connect(
    host='localhost',
    user='root',
    password='Shivam@$12',
    database='db1'
)
cur = mydb.cursor()
s = "DELETE FROM book WHERE title='PHP'"
cur.execute(s)
mydb.commit()
```

Output :

```
Windows PowerShell
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Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\sspat\OneDrive\Desktop\python> & C:/Users/sspat/AppData/Local/Programs/Python/Python310/python.exe c:/Users/sspat/OneDrive/Desktop/sql.py
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(1, 'Python3', 345.0)
(2, 'PHP', 135.0)
(3, 'Java8', 450.0)
(4, 'HTML', 200.0)
PS C:\Users\sspat\OneDrive\Desktop\python>
```

Conclusion : Thus we have a connected database.