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Batch C

SY CE

AIM:

Write a program in a python to perform CRUD operations on database(sqlite3/MYSqL)

THEORY:

MySQL is an Oracle-backed open source relational database management system (RDBMS) based on Structured Query Language (SQL). MySQL runs on virtually all platforms, including Linux, UNIX and Windows. Although it can be used in a wide range of applications, MySQL is most often associated with web applications and online publishing. Python needs a mysql driver to access the MYSQL database. In order to do that we download the mysql-connector library for python. It is simple to use and we can do a lot with this library.

CODE :

```
import sqlite3

conn = sqlite3.connect('siddhi1.db')
cursor = conn.cursor()

cursor.execute('''
    CREATE TABLE IF NOT EXISTS Student (
        id INTEGER PRIMARY KEY ,
        name TEXT,
        age INTEGER,
        branch TEXT
    )
''')
conn.commit()

def enroll(id, name, age, branch):
    cursor.execute('INSERT INTO Student (id, name, age, branch) VALUES (?, ?, ?, ?)', (id, name, age, branch))
```

```
# conn.commit()

def dis_students():
    cursor.execute('SELECT * FROM Student')
    rows = cursor.fetchall()
    for row in rows:
        print(row)

def updateinfo(Id, age, branch):
    cursor.execute('UPDATE Student SET age=?, branch=? WHERE id=?', (age,
branch, Id))
    conn.commit()

def delete(Id):
    cursor.execute('DELETE FROM Student WHERE id=?', (Id,))
    conn.commit()

print("After enrolling")
enroll(123, 'XYZ', 19, 'Computer')
enroll(456, 'ABC', 13, 'It')
dis_students()
print("\n")

print("After updating info")
updateinfo(456, 20, "Computer")
dis_students()
print("\n")

print("After Deleting")
delete(123)
dis_students()
print("\n")

conn.close()
```

OUTPUT:

After enrolling

(123, 'XYZ', 19, 'Computer')

(456, 'ABC', 13, 'It')

(145856963, 'XYZ', 18, 'Computer')

After updating info

(123, 'XYZ', 19, 'Computer')

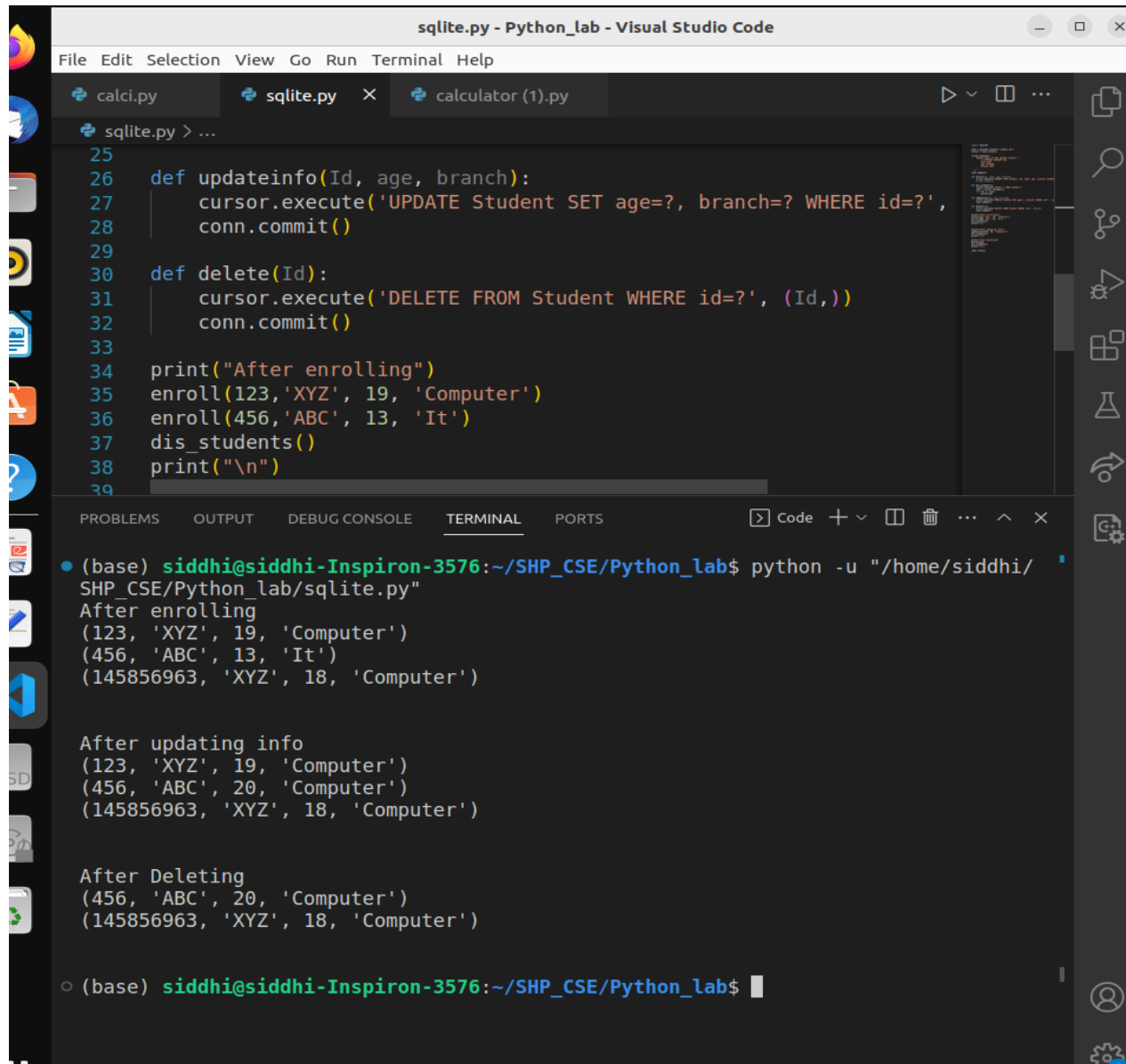
(456, 'ABC', 20, 'Computer')

(145856963, 'XYZ', 18, 'Computer')

After Deleting

(456, 'ABC', 20, 'Computer')

(145856963, 'XYZ', 18, 'Computer')



```
sqlite.py - Python_lab - Visual Studio Code
File Edit Selection View Go Run Terminal Help

calci.py  sqlite.py  calculator (1).py

sqlite.py > ...
25
26 def updateinfo(Id, age, branch):
27     cursor.execute('UPDATE Student SET age=?, branch=? WHERE id=?',
28                     conn.commit())
29
30 def delete(Id):
31     cursor.execute('DELETE FROM Student WHERE id=?', (Id,))
32     conn.commit()
33
34 print("After enrolling")
35 enroll(123,'XYZ', 19, 'Computer')
36 enroll(456,'ABC', 13, 'It')
37 dis_students()
38 print("\n")
39

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
Code + - [] [X] ^ x

• (base) siddhi@siddhi-Inspiron-3576:~/SHP_CSE/Python_lab$ python -u "/home/siddhi/
SHP_CSE/Python_lab/sqlite.py"
After enrolling
(123, 'XYZ', 19, 'Computer')
(456, 'ABC', 13, 'It')
(145856963, 'XYZ', 18, 'Computer')

After updating info
(123, 'XYZ', 19, 'Computer')
(456, 'ABC', 20, 'Computer')
(145856963, 'XYZ', 18, 'Computer')

After Deleting
(456, 'ABC', 20, 'Computer')
(145856963, 'XYZ', 18, 'Computer')

○ (base) siddhi@siddhi-Inspiron-3576:~/SHP_CSE/Python_lab$
```

CONCLUSION:

Thus, from this experiment I developed an application in Python Programming Language for understanding mysql database creation and database connectivity with python and evaluate different database operations.