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Question1. Perform CRUD operations on Student Table as outlined in the reference ¶

```
In [4]: import sqlite3

conn = sqlite3.connect('students.db')

cursor = conn.cursor()

cursor.execute("DROP TABLE IF EXISTS STUDENT")
query = """CREATE TABLE STUDENT(
        ID INT PRIMARY KEY NOT NULL,
        NAME CHAR(20) NOT NULL,
        ROLL CHAR(20),
        ADDRESS CHAR(50),
        CLASS CHAR(20) )"""
cursor.execute(query)

conn.commit()
conn.close()
```

```
In [6]: import sqlite3
conn = sqlite3.connect('students.db')
conn.execute("INSERT INTO STUDENT (ID,NAME,ROLL,ADDRESS,CLASS) "
            "VALUES (1, 'Arul', '001', 'Trichy', 'M.sc.ds')")
conn.execute("INSERT INTO STUDENT (ID,NAME,ROLL,ADDRESS,CLASS) "
            "VALUES (2, 'Asha', '002', 'Tanjore', 'B.E')")
conn.execute("INSERT INTO STUDENT (ID,NAME,ROLL,ADDRESS,CLASS) "
            "VALUES (3, 'Raj', '003', 'Pondy', 'B.sc')")
conn.execute("INSERT INTO STUDENT (ID,NAME,ROLL,ADDRESS,CLASS) "
            "VALUES (4, 'Kumar', '004', 'Kerala', 'B.voc')")
conn.execute("INSERT INTO STUDENT (ID,NAME,ROLL,ADDRESS,CLASS) "
            "VALUES (5, 'Godwin', '007', 'Trichy', '5th')")
conn.commit()
conn.close()
```

```
In [8]: import sqlite3
conn = sqlite3.connect('students.db')
cursor = conn.execute("SELECT * from STUDENT")
print(cursor.fetchall())
conn.close()
```

```
[(1, 'Arul', '001', 'Trichy', 'M.sc.ds'), (2, 'Asha', '002', 'Tanjore', 'B.E'),
(3, 'Raj', '003', 'Pondy', 'B.sc'), (4, 'Kumar', '004', 'Kerala', 'B.voc'), (5,
'Godwin', '007', 'Trichy', '5th')]
```

```
In [9]: import sqlite3
conn = sqlite3.connect('students.db')
conn.execute("UPDATE STUDENT set ROLL = 005 where ID = 1")
conn.commit()
cursor = conn.execute("SELECT * from STUDENT")
print(cursor.fetchall())
conn.close()
```

```
[(1, 'Arul', '5', 'Trichy', 'M.sc.ds'), (2, 'Asha', '002', 'Tanjore', 'B.E'),
(3, 'Raj', '003', 'Pondy', 'B.sc'), (4, 'Kumar', '004', 'Kerala', 'B.voc'), (5,
'Godwin', '007', 'Trichy', '5th')]
```

```
In [10]: import sqlite3
conn = sqlite3.connect('students.db')
conn.execute("DELETE from STUDENT where ID = 3;")
conn.commit()
cursor = conn.execute("SELECT * from STUDENT")
print(cursor.fetchall())
conn.close()
```

```
[(1, 'Arul', '5', 'Trichy', 'M.sc.ds'), (2, 'Asha', '002', 'Tanjore', 'B.E'),
(4, 'Kumar', '004', 'Kerala', 'B.voc'), (5, 'Godwin', '007', 'Trichy', '5th')]
```

```
In [ ]:
```

Question2. Open the table MyRestaurants.db that you have created for NoSQL course

In [10]: !pip install cx_Oracle

Requirement already satisfied: cx_Oracle in c:\users\hp\anaconda3\lib\site-packages (8.3.0)

```
In [11]: import cx_Oracle
conn=cx_Oracle.connect("system/admin")
sql="select * from myrestaurants"
cursor=conn.cursor()
cursor.execute(sql)
for row in cursor.execute("select * from myrestaurants"):
    print("name",row[0])
    print("foodtype",row[1])
    print("distance",row[2])
    print("lastvisit",row[3])
    print("ilike",row[4])
conn.commit()
conn.close()
```

```
name Apple_leaf
foodtype non veg
distance 15
lastvisit 01-jan-2020
ilike 1
name sowmays
foodtype veg
distance 18
lastvisit 20-mar-2021
ilike 1
name thinnappa
foodtype non veg
distance 25
lastvisit 20-nov-2019
ilike 0
name sribhavan
foodtype veg
distance 18
lastvisit 20-dec-2019
ilike 0
name chinaworld
foodtype chinese
distance 14
lastvisit 05-mar-2020
ilike 1
name littlechina
foodtype chinese
distance 30
lastvisit 10-mar-2020
ilike 0
name munivilas
foodtype nonveg
distance 20
lastvisit 05-feb-2019
ilike None
name dosacorner
foodtype nonveg
distance 10
lastvisit 05-feb-2020
ilike 1
```

Question3. Write a SQL query that returns all restaurants in your table MyRestaurants.db.

```
In [13]: import cx_Oracle
conn=cx_Oracle.connect("system/admin")
sql="select * from myrestaurants"
cursor=conn.cursor()
cursor.execute(sql)
for row in cursor.execute("select * from myrestaurants"):
    print("Name : ",row[0])
conn.commit()
conn.close()
```

```
Name : Apple_leaf
Name : sowmays
Name : thinnappa
Name : sribhavan
Name : chinaworld
Name : littlechina
Name : munivilas
Name : dosacorner
```

Question4. Write a SQL query that returns the names of restaurants in descending order that makes Chinese foods.

```
In [15]: import cx_Oracle
conn=cx_Oracle.connect("system/admin")
sql="select * from myrestaurants"
cursor=conn.cursor()
cursor.execute(sql)
for row in cursor.execute("select name,foodtype from myrestaurants where foodtype='Chinese'"):
    print("name",row[0])
    print("foodtype",row[1])
    print("\n")
conn.commit()
conn.close()
```

```
name chinaworld
foodtype chinese
```

```
name littlechina
foodtype chinese
```

In []:

