

## Práctica Número 3. Unidad II

### 1. Crear tabla Estudiante

```
sqlite> CREATE TABLE Estudiante(  
  (x1...> matricula int not null primary key,  
  (x1...> name text not null,  
  (x1...> paterno text not null,  
  (x1...> materno text null,  
  (x1...> carrera text not null)  
  ...> ;  
sqlite> .tables  
Estudiante  usuario  
sqlite> |
```

### 2. Insertar 5 registros de compañeros

```
sqlite> INSERT INTO Estudiante(matricula, name, paterno, materno, carrera)  
...> VALUES ('1222100503', 'Alan', 'Aguilar', 'Fuentes', 'Redes Digitales');  
sqlite> INSERT INTO Estudiante(matricula, name, paterno, materno, carrera)  
...> VALUES ('1222100486', 'Angel', 'Mancilla', 'Ortiz', 'Redes Digitales');  
sqlite> INSERT INTO Estudiante(matricula, name, paterno, materno, carrera)  
...> VALUES ('1222100895', 'Montserrat', 'Orduña', 'Redes Digitales');  
Parse error: 4 values for 5 columns  
sqlite> VALUES ('1222100895', 'Montserrat', 'Orduña', ' ', 'Redes Digitales');  
1222100895|Montserrat|Orduña| |Redes Digitales  
sqlite> INSERT INTO Estudiante(matricula, name, paterno, materno, carrera)  
...> VALUES ('1222100895', 'Montserrat', 'Orduña', ' ', 'Redes Digitales');  
sqlite> INSERT INTO Estudiante(matricula, name, paterno, materno, carrera)  
...> VALUES ('1222100815', 'Sharon', 'Olvera', 'Ibarra', 'Redes Digitales');  
sqlite> |
```

### 3. Listar todos los estudiantes, pero, solo matricula, nombre

```
sqlite> SELECT matricula, name FROM Estudiante;  
1222100487|Kevin  
1222100503|Alan  
1222100486|Angel  
1222100895|Montserrat  
1222100815|Sharon
```

### 4. Insertar registro

- Matricula: 100210046
- Nombre: Abraham
- Paterno: López
- Materno: Juárez
- Carrera: Redes Digitales

```
sqlite> INSERT INTO Estudiante(matricula, name, paterno, materno, carrera)  
...> VALUES ('100210046', 'Abraham', 'Lopez', 'Juarez', 'Redes Digitales');  
sqlite> |
```

```
100210046|Abraham
```

## 5. Modificar el registro Abraham

### Abraham Josue

```
sqlite> UPDATE Estudiante
...> SET
...> name = 'Abraham Josue'
...> WHERE
...> matricula = '100210046';
sqlite> SELECT matricula, name FROM Estudiante;
1222100487|Kevin
1222100503|Alan
1222100486|Angel
1222100895|Monserrat
1222100815|Sharon
100210046|Abraham Josue
sqlite> |
```

## 6. Eliminar al menos dos registros

```
sqlite> DELETE FROM Estudiante
...> WHERE
...> name = 'Sharon';
sqlite> DELETE FROM Estudiante
...> WHERE
...> name = 'Alan';
sqlite> SELECT matricula, name FROM Estudiante;
1222100487|Kevin
1222100486|Angel
1222100895|Monserrat
100210046|Abraham Josue
sqlite> |
```

## 7. Implementar método GET con Python

```
import json
import sqlite3
from flask import Flask, request, jsonify

app = Flask(__name__)

def get_db_connection():
    conn = sqlite3.connect('crud.db')
    conn.row_factory = sqlite3.Row
    return conn

@app.route('/', methods=['GET'])
def query_records():
    name = request.args.get('name')
    registros = []
    conn = get_db_connection()
    cursor = conn.cursor()
    cursor.execute('SELECT * FROM Estudiante')
    data = cursor.fetchall()
    for reg in data:
        registros.append(dict(reg))
    conn.close()
    return jsonify(json.dumps(registros))

app.run(debug=True)
```

```
1 [{"matricula": 1222100487, "name": "Kevin", "paterno": "Cabrera", "materno": "Luna", "carrera": "Redes Digitales"}, {"matricula": 1222100486, "name": "Angel", "paterno": "Mancilla", "materno": "Ortiz", "carrera": "Redes Digitales"}, {"matricula": 1222100895, "name": "Monserrat", "paterno": "Ordu\u00f1a", "materno": "", "carrera": "Redes Digitales"}, {"matricula": 100210046, "name": "Abraham Josue", "paterno": "Lopez", "materno": "Juarez", "carrera": "Redes Digitales"}]
```