In [1]:
```
import sqlite3
def create_tables(cursor):
    cursor.execute('''CREATE TABLE IF NOT EXISTS Hospital (
                        Hospital_Id INTEGER PRIMARY KEY,
                        Hospital_Name TEXT,
                        Bed_Count INTEGER
                    )''')

    cursor.execute('''CREATE TABLE IF NOT EXISTS Doctor (
                        Doctor_Id INTEGER PRIMARY KEY,
                        Doctor_Name TEXT,
                        Hospital_Id INTEGER,
                        Specialty TEXT,
                        Experience INTEGER,
                        Salary REAL,
                        FOREIGN KEY (Hospital_Id) REFERENCES Hospital(Hospi
                    )''')
def insert_data(cursor):
    hospitals = [
        (1, 'Hospital A', 100),
        (2, 'Hospital B', 150),
        (3, 'Hospital C', 200),
        (4, 'Hospital D', 120),
        (5, 'Hospital E', 180)
    ]

    doctors = [
        (101, 'Dr. John', 1, 'Cardiology', 10, 150000),
        (102, 'Dr. Smith', 1, 'Neurology', 8, 130000),
        (103, 'Dr. Lisa', 2, 'Pediatrics', 5, 120000),
        (104, 'Dr. Emily', 3, 'Orthopedics', 12, 180000),
        (105, 'Dr. Mike', 4, 'Oncology', 7, 140000),
        (106, 'Dr. Sarah', 5, 'Dermatology', 9, 160000)
    ]

    cursor.executemany('INSERT INTO Hospital VALUES (?, ?, ?)', hospitals)
    cursor.executemany('INSERT INTO Doctor VALUES (?, ?, ?, ?, ?, ?)', doct
def fetch_hospital_doctor_info(cursor, hospital_id, doctor_id):
    cursor.execute('''SELECT h.Hospital_Name, h.Bed_Count, d.Doctor_Name, d
                      FROM Hospital h
                      JOIN Doctor d ON h.Hospital_Id = d.Hospital_Id
                      WHERE h.Hospital_Id = ? AND d.Doctor_Id = ?''', (hosp
    result = cursor.fetchone()
    return result
def get_doctors_by_specialty_and_salary(cursor, specialty, salary):
    cursor.execute('''SELECT Doctor_Name, Specialty, Experience, Salary
                      FROM Doctor
                      WHERE Specialty = ? AND Salary >= ?''', (specialty, s
    result = cursor.fetchall()
    return result
def update_doctor_experience(cursor, doctor_id, experience):
    cursor.execute('''UPDATE Doctor
                      SET Experience = ?
                      WHERE Doctor_Id = ?''', (experience, doctor_id))
def get_doctors_from_hospital(cursor, hospital_id):
    cursor.execute('''SELECT Doctor_Name, Specialty, Experience, Salary
                      FROM Doctor
                      WHERE Hospital_Id = ?''', (hospital_id,))
    result = cursor.fetchall()
    return result
conn = sqlite3.connect('hospital.db')
```

```
cursor = conn.cursor()
#create_tables(cursor)
#insert_data(cursor)
conn.commit()
print("1. Fetch Hospital and Doctor Information:")
print(fetch_hospital_doctor_info(cursor, 1, 101))
print("\n2. Get the list of doctors by specialty and salary:")
print(get_doctors_by_specialty_and_salary(cursor, 'Cardiology', 140000))
print("\n3. Update doctor's experience:")
update_doctor_experience(cursor, 101, 12)
conn.commit()
print("Doctor's experience updated.")
print("\n4. Get a list of doctors from a given hospital:")
print(get_doctors_from_hospital(cursor, 2))
conn.close()
```

```
1. Fetch Hospital and Doctor Information:
('Hospital A', 100, 'Dr. John', 'Cardiology', 12, 150000.0)

2. Get the list of doctors by specialty and salary:
[('Dr. John', 'Cardiology', 12, 150000.0)]

3. Update doctor's experience:
Doctor's experience updated.

4. Get a list of doctors from a given hospital:
[('Dr. Lisa', 'Pediatrics', 5, 120000.0)]
```

In [ ]:

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