**Python Basics - Domain Specific Assignment**

1. Using **psycopg2** connect to a local database and create the following tables:
   1. Doctor (id, name, specialization (FK), phone\_number)
   2. Patient (id, name, date\_of\_birth, gender)
   3. Appointment (id, doctor\_id (FK), patient\_id (FK), fee, diagnosis)
   4. Doctor Specialization (id, specialization\_type)
2. **INSERT** the following data in the tables. Use both **execute()** and **executemany()** methods with parameter binding.

**Doctor Specialization**

| **id** | **specialization\_type** |
| --- | --- |
| 1 | Anaesthesiologist |
| 2 | Surgeon |
| 3 | Psychiatrist |

**Doctor**

| **id** | **name** | **specialization** | **phone\_number** |
| --- | --- | --- | --- |
| 1 | Lionel Smart | 1 | 2811232323 |
| 2 | Michelle Sanders | 2 | 1899912310 |
| 3 | Pretti Patel | 3 | 7980123982 |
| 4 | Sadiq Khan | 1 | 7983129813 |
| 5 | Chaz Smith | 2 | 2039820398 |

**Patient**

| **id** | **name** | **date\_of\_birth** | **gender** |
| --- | --- | --- | --- |
| 1 | Jane Henderson | 1989-09-19 | Female |
| 2 | Alice Sprigg | 1991-11-12 | Female |
| 3 | Dave Carr | 1995-03-28 | Male |
| 4 | Morris Beckman | 2001-07-07 | Male |

**Appointment**

| **id** | **doctor\_id** | **patient\_id** | **fee** | **diagnosis** |
| --- | --- | --- | --- | --- |
| 1 | 1 | 2 | 1000 |  |
| 2 | 1 | 4 | 1000 | Headache |
| 3 | 4 | 3 | 2000 |  |
| 4 | 2 | 1 | 1500 | Back Pain |

1. **GET** the count of patients born after 1990.
2. **GET** the appointments made with “Surgeon” specialized doctors.
3. **UPDATE** fees of appointments and reduce them by 25%.
4. **UPDATE** phone\_number of Chaz Smith to 1231292310.
5. **DELETE** all doctors who are specialized as “Psychiatrist”.