## Homework Assignment #2

- 1. The information about the prescriptions-R-X chain of pharmacies is given in the following. Draw an E/R diagram that captures the given information.
  - a) Patients are identified by a healthcare number, and their names, addresses, and ages must be recorded. Doctors are identified by a doctor id number. For each doctor, the name, specialty, and years of experience must be recorded. Every patient has a primary physician. Each pharmaceutical company is identified by name and has a phone number. For each drug, the trade name and formula must be recorded.
  - b) Each drug is produced by a given pharmaceutical company, and the trade name identifies a drug only *among the products of that company*.
  - c) Each pharmacy has a name, address, and phone number. Each pharmacy sells several drugs and has a price for each. A drug could be sold at several pharmacies, and the price could vary from one pharmacy to another.
  - d) Doctors prescribe drugs for patients. A doctor could prescribe one or more drugs for several patients, and a patient could obtain prescriptions from several doctors. Each prescription has a date and a quantity associated with it. We need to know who has prescribed what for whom. You can assume that if a doctor prescribes the same drug for the same patient more than once, only the last such prescription needs to be stored.
- 2. Translate the E/R diagram for the above exercise to DB schema. Specify primary keys.
  - a) Write and execute in Postgre shell the SQL statements for the creation of the tables in this schema.
  - b) Then write and execute SQL INSERT statements to insert at least one tuple (that you create) into each table, and store these statements in file ph\_data.sql

## Submit:

- 1. E/R diagram and schema in file **Ph.pdf**
- 2. Output of

\dt

(Listing of all tables) in file **ph\_table\_list.txt** 

3. For each table: output of

\d+ table name;

This will list all the columns and their definitions for each table. Store the output in file **ph\_table\_def.txt.** 

4. The file **ph\_data.sql** which contains your insert statements.