Done

- First you have to install, set up PostgreSQL on your system. You should have done this already.
- You can do this ungraded assignment from the command line tool psql, but using pgadmin3/pgadmin4 allows you to get a graphical view of the plan.
- You should download from moodle the schema files DDL.sql, which can be used first time, and DDL_drop.sql, which drops tables and then recreates them, which you can use in subsequent imes
- Also download the file smallRelationsInsertFile.sqlwhich has sample data for a sample university database that is provided with the Database System Concepts book.
- Browse the files to get a rough idea of what they contain. Don't worry about understanding everything in there, you have time for that later in the semester
- The schema and data can be executed either using pgadmin3 or directly using psql
  - In order to run a SQL script file from psql run
    psql -h localhost -p xyz0 -d postgres -f script_file_name
    where xyz0 is the port on which PostgreSQL is running
  - To run from pgadmin3, first connect to the database and open and SQL window. Then do a File > Open from the SQL window, which loads the contents of the file into the window, and then execute it.
    Don't use this for very large files ; use psql for such very large files.
- Execute the schema file DDL.sql (or DDL_drop.sql if you already have the University schema tables present).
- Execute the data file smallRelationsInsertFile.sql
- Browse the tables and data using pgadmin3 to make sure things have been loaded fine.
- Run some further SQL queries given below, to see what each of them does.

1. Retrieve data from a relation
   1. select * from student;
   2. select * from student where name <= 'Shankar';
   3. select course_id, title from course where credits = 3;
2. Join data from 2 tables
   1. select * from department;
   2. select * from course;
   3. select * from course, department where course.dept_name = department.dept_name;
3. Aggregates
   1. select count(*) from course where credits = 3;
   2. select sum(credits) from course;
4. Set operations:
   1. (SELECT course_id FROM section WHERE year = 2010) INTERSECT (SELECT course_id FROM section WHERE year = 2009)
   2. As above, but replace intersect by union
   3. As above, but replace union by except
5. Creating tables, inserting and deleting data
   1. CREATE TABLE classRep(batchyear numeric(4,0), dept_name varchar(20), program varchar(10), ID varchar(5));
   2. INSERT INTO classrep values (2010, 'Comp. Sci.', 'B.Tech.', '12345');
   3. DELETE FROM classrep WHERE ID = '12345';

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