**CS1555 Recitation 6**

**Objective:** To practice SQL queries on PostgreSQL.

Before we start:

* Download the SQL script studentdb.sql through an sFTP client (such as FileZilla) from the machine “class3.cs.pitt.edu” at the directory:
  + /afs/pitt.edu/home/r/a/raa88/public/studentdb.sql

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Find the address and phone number of the student whose SID is 123

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. List all the courses offered in ‘Spring 11’.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. List the student ID and course number for every student who took a course in Fall 10 but has not received a grade yet.

4. List the SIDs *and GPAs* of the students whose GPAs are greater than 3.7. List them in the descending order of the GPAs.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. List the SIDs of all the students and the number of courses they have taken.

What if we want names too?

How about another way?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6. Now insert a tuple into the Student table:

insert into student values (130, 'Peter', 1,'CS', '????');

Then run the query 5 again. How can we include this new student in the result, with 0 as the number of classes he has taken?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

7. For each course a student has repeated, list the studentID and course number.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8. Assuming there is another table for outreach students:

**create table** students\_outreach **(**

sid **integer not null,**

name **varchar(15) not null,**class **integer,**major **varchar(10),**ssn **varchar(16) not null,  
constraint pk\_stud\_bad primary key(sid)**

**);**

Insert the following student in the outreach table:

insert into students\_outreach values ('130', 'Zach', 1,'CS', ‘abcd’);

List all the students in your organization?