

**CMPS460**  
**Spring 2011**  
**RELATIONAL ALGEBRA PROBLEMS**

**DUE DATE:** Start of class Monday, March 14<sup>th</sup>, 2011

**DATABASE:**

**DOCTOR (ID[pk], Name, Assistant\_Nurse\_ID[fk])**  
**PATIENT (SSN[pk], Name, Gender, Age, Assigned\_Nurse\_ID[fk])**  
**NURSE (ID[pk], Name)**  
**REFER (FromDoc\_ID[pk,fk], ToDoc\_ID[pk,fk], Patient\_SSN[pk,fk], Date)**  
**SEE (Doc\_ID[pk,fk], Patient\_SSN[pk,fk], Date)**

1. List the ID and name of doctors who only see children (< 18 years old).
2. List the ID and name of nurses who assist more than one doctor.
3. List the SSN and name of patients who have been referred to another doctor and didn't go.
4. List the ID and name of nurses who have no patients.
5. List the SSN and name of patients who have seen all of the doctors.
6. List the SSN and name of patients who have seen more than one doctor on the same day.
7. List the SSN and name of patients who are not assigned to a nurse and are over 65 years old.

**NOTE:** This assignment is a pencil and paper exercise.