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Today's class: catch-up; review. Next class: Midterm Exam 1.

- 1. List the members of your group below. Underline your name.
- 2. Let PSCUD denote the relational algebra with operators projection, selection, cross product, union, and difference. Prove or disprove each: PSCUD can express: (a) existential quantification; (b) universal quantification. Illustrate your answer with suitable examples.

3. Recall the students-courses-enrollments database from previous exercises. We say a TA x more senior than a TA y if x serves as a TA for a course taken by y. A TA is maximally senior if there is no TA senior to him or her. Write Datalog and SQL (with recursion) queries to find the names of the maximally senior TAs.