Class Worksheet

- Studied(student,cid)
- Course(cid,cname,faulty)
- Prereq(cid,prereqid)
- NoCredit(cid1,cid2)

(1) Write an RC query that computes all the courses that are prerequisites of no other courses, and contradict no other courses.

(2) Write a Datalog query that computes all CS courses with prerequisites from the Math faculty.

(3) Write a Datalog query that computes all CS courses that rely on Math courses (i.e., have a Math course as a prerequisite, or have a prerequisite that relies on a Math course).
(4) Write a semi-positive Datalog program that computes all out-of-CS courses that are (immediate) prerequisites of CS course.

(5) Write a stratified Datalog program that computes pairs (student,course) such that the student can take the course on the next semester. (You can assume that each student has taken at least one course already.) Show a stratification of your program.

(6) Write a stratified Datalog program that finds all faculties that CS does not rely on. (You can assume that each faculty has at least one course.) Show a stratification of your program.