-- 1 a  
SELECT \* FROM course WHERE course.credits > 3;  
  
-- 1 b  
SELECT \* FROM classroom WHERE (classroom.building='Watson' or classroom.building='Packard');  
  
-- 1 c  
SELECT \* FROM course WHERE course.dept\_name='Comp. Sci.';  
  
-- 1 d  
SELECT course.course\_id,title,dept\_name,credits,semester FROM course,section WHERE course.course\_id=section.course\_id and section.semester='Fall';  
  
-- 1 e  
SELECT\* FROM student WHERE student.tot\_cred>45 and student.tot\_cred<90;  
  
-- 1 f  
SELECT \* FROM student WHERE student.name~\*'[aewiuoy]$';  
  
-- 1 g  
SELECT course.course\_id, title, dept\_name,credits,prereq\_id FROM course,prereq WHERE prereq.course\_id=course.course\_id and prereq\_id='CS-101';  
  
-- 2 a  
SELECT dept\_name,avg(instructor.salary) FROM instructor group by dept\_name order by avg(instructor.salary) asc;  
  
-- 2 b  
SELECT department.building,count(1) FROM department,course WHERE department.dept\_name = course.dept\_name GROUP BY department.building HAVING count(1)=(SELECT MAX(second.number) FROM (SELECT count(1) as number FROM department,course WHERE department.dept\_name = course.dept\_name group by department.building) as second);  
  
-- 2 c  
SELECT department.dept\_name,count(1) FROM department,course WHERE department.dept\_name = course.dept\_name GROUP BY department.dept\_name HAVING count(1)=(SELECT MIN(second.number) FROM (SELECT count(1) as number FROM department,course WHERE department.dept\_name = course.dept\_name group by department.dept\_name) as second);  
  
-- 2 d  
SELECT DISTINCT student.id,student.name FROM student WHERE student.id IN (SELECT third.id FROM (SELECT student.id, count(1) as number FROM student,takes,course WHERE student.id=takes.id and takes.course\_id=course.course\_id and course.dept\_name='Comp. Sci.' group by student.id)as third WHERE third.number>3);  
  
-- 2 e  
SELECT \* FROM instructor WHERE instructor.dept\_name='Biology' or instructor.dept\_name='Philosophy' or instructor.dept\_name='Music';  
  
-- 2 f  
SELECT DISTINCT instructor.id, instructor.name, instructor.dept\_name, instructor.salary FROM instructor,teaches WHERE instructor.id=teaches.id and teaches.year=2018 and teaches.id NOT IN (SELECT DISTINCT instructor.id FROM instructor,teaches WHERE instructor.id=teaches.id and teaches.year=2017 );  
  
-- 3 a  
SELECT DISTINCT student.id,student.name,student.dept\_name,student.tot\_cred FROM student,takes,course WHERE student.id=takes.id and takes.course\_id=course.course\_id and course.dept\_name='Comp. Sci.' and (takes.grade='A' or takes.grade='A-') group by (student.id,student.name,student.dept\_name,student.tot\_cred) order by student.name;  
  
-- 3 b  
SELECT \* FROM instructor WHERE instructor.id in(SELECT advisor.i\_id FROM advisor,student,takes WHERE advisor.s\_id=student.id and takes.id=student.id and (takes.grade!='A' and takes.grade!='A-' and takes.grade!='B+' and takes.grade!='B' or takes.grade IS NULL));  
  
-- 3 c  
SELECT DISTINCT \* FROM department WHERE department.dept\_name NOT IN (SELECT DISTINCT department.dept\_name FROM department,student,takes WHERE department.dept\_name=student.dept\_name and student.id=takes.id and (takes.grade='F' or takes.grade='C'));  
  
-- 3 d  
SELECT DISTINCT \* FROM instructor WHERE instructor.id NOT IN (SELECT DISTINCT instructor.id FROM instructor,teaches,takes WHERE instructor.id=teaches.id and teaches.course\_id=takes.course\_id and takes.grade='A');  
  
-- 3 e  
SELECT DISTINCT course.course\_id,course.title,course.dept\_name, course.credits FROM course,section,time\_slot WHERE section.time\_slot\_id=time\_slot.time\_slot\_id and end\_hr<=13 and section.course\_id=course.course\_id;