1

a

SELECT title FROM course WHERE credits>3;

b

SELECT room\_number FROM classroom WHERE building='Watson' AND building='Packard';

c

SELECT title FROM course WHERE dept\_name='Comp. Sci.';

d

SELECT \* FROM course;

e

SELECT title FROM course WHERE dept\_name='Comp. Sci.';

f

SELECT title FROM course, section WHERE course.course\_id=section.course\_id AND section.semester='Fall';

g

SELECT name FROM student WHERE tot\_cred>45 AND tot\_cred<90;

h

SELECT name FROM student WHERE RIGHT(name, 1) IN ('a','e','y','u','i','o');

i

SELECT title FROM course, prereq WHERE course.course\_id=prereq.course\_id AND prereq\_id='CS-101';

2

a

SELECT dept\_name, avg(salary) FROM instructor GROUP BY dept\_name;

b

SELECT building FROM (SELECT building,count(section) AS co FROM section GROUP BY building) AS foo WHERE co=(SELECT MIN(co)FROM(SELECT building,count(section) AS co FROM section GROUP BY building)AS ff);

c

SELECT dept\_name FROM course GROUP BY dept\_name ORDER BY count(course\_id) LIMIT 1;

d

SELECT takes.id FROM takes, course WHERE course.dept\_name='Comp. Sci.'AND course.course\_id=takes.course\_id GROUP BY takes.id HAVING count(course.dept\_name)>3 ;

e

SELECT instructor.name FROM teaches, instructor, course WHERE course.dept\_name='Biology' AND course.course\_id=teaches.course\_id AND instructor.id=teaches.id GROUP BY instructor.name INTERSECT

SELECT instructor.name FROM teaches, instructor, course WHERE course.dept\_name='Music' AND course.course\_id=teaches.course\_id AND instructor.id=teaches.id GROUP BY instructor.name INTERSECT

SELECT instructor.name FROM teaches, instructor, course WHERE course.dept\_name='Finance' AND course.course\_id=teaches.course\_id AND instructor.id=teaches.id GROUP BY instructor.name;

f

SELECT fff.name FROM (SELECT \* FROM teaches, instructor, course WHERE course.course\_id=teaches.course\_id AND instructor.id=teaches.id) AS fff WHERE fff.year=2018 INTERSECT

SELECT fff.name FROM (SELECT \* FROM teaches, instructor, course WHERE course.course\_id=teaches.course\_id AND instructor.id=teaches.id) AS fff WHERE NOT fff.year=2017;

3

a

SELECT id FROM student WHERE dept\_name='Comp. Sci.'

INTERSECT SELECT id FROM takes WHERE grade='A' OR grade='A-';

b

SELECT i\_id FROM takes, advisor WHERE NOT(takes.grade='B+' OR takes.grade='A-' OR takes.grade='A') AND takes.id=advisor.s\_id GROUP BY takes.id , advisor.s\_id;