**3a.**

SELECT professor.ProfessorName, professor.ProfessorProgram, student.firstname, student.lastname

FROM professor

INNER JOIN student\_professor on professor.ProfessorID = student\_professor.ProfessorID

INNER JOIN student on student.StudentNO = student\_professor.StudentNO

ORDER BY ProfessorName, lastname

**3b.**

SELECT professor.ProfessorName, student.firstname, student.lastname

FROM professor

INNER JOIN student\_professor on professor.ProfessorID = student\_professor.ProfessorID

INNER JOIN student on student.StudentNO = student\_professor.StudentNO

WHERE student\_professor.mentor='1'

ORDER BY ProfessorName, lastname, firstname

**3c.**

SELECT \*

FROM professor

WHERE 1 IN (SELECT ProfessorID FROM student\_professor WHERE mentor = 1)

**4a.**

SELECT \* FROM employees;

SELECT \* FROM departments;

SELECT \* FROM employees LEFT JOIN departments ON employees.DEPARTMENT\_ID=departments.DEPARTMENT\_ID

WHERE employees.DEPARTMENT\_ID IS NOT NULL

**4b.**

SELECT \* FROM employees;

SELECT \* FROM departments;

SELECT \* FROM employees LEFT JOIN departments ON employees.DEPARTMENT\_ID=departments.DEPARTMENT\_ID

**4c.**

SELECT \* FROM employees;

SELECT \* FROM departments;

SELECT \* FROM employees RIGHT JOIN departments ON employees.DEPARTMENT\_ID=departments.DEPARTMENT\_ID