

Vejledende løsninger til left, right og outer join (new_academy)

Opgave 1: Alle studerende og deres tilmeldinger

```
SELECT students.first_name, students.last_name, courses.course_name, enrollments.grade  
FROM students LEFT JOIN enrollments ON students.student_id = enrollments.student_id  
LEFT JOIN courses ON enrollments.course_id = courses.course_id;
```

Opgave 2: Alle kurser og deres tilmeldinger

```
SELECT courses.course_name, students.first_name, students.last_name, enrollments.grade  
FROM courses  
  
LEFT JOIN enrollments ON courses.course_id = enrollments.course_id  
  
LEFT JOIN students ON enrollments.student_id = students.student_id;
```

Opgave 3: Studerende uden tilmeldinger

```
SELECT students.first_name, students.last_name FROM students LEFT JOIN enrollments ON  
students.student_id = enrollments.student_id WHERE enrollments.enrollment_id IS NULL;
```

Opgave 4: Kurser uden studerende

```
SELECT courses.course_name  
FROM courses  
  
LEFT JOIN enrollments ON courses.course_id = enrollments.course_id  
  
WHERE enrollments.enrollment_id IS NULL;
```

Opgave 5: Alle lærere og alle kurser

```
SELECT teachers.first_name, teachers.last_name, courses.course_name  
FROM teachers  
  
FULL OUTER JOIN courses ON teachers.teacher_id = courses.teacher_id;
```

Opgave 6: Lærere uden kurser

```
SELECT teachers.first_name, teachers.last_name  
FROM teachers  
LEFT JOIN courses ON teachers.teacher_id = courses.teacher_id  
WHERE courses.course_id IS NULL;
```

Bonus opgave: Kombination

```
SELECT students.first_name, students.last_name, courses.course_name  
FROM students  
FULL OUTER JOIN enrollments ON students.student_id = enrollments.student_id  
FULL OUTER JOIN courses ON enrollments.course_id = courses.course_id;
```