Exercise 11

Advanced SQL 2: Division

For this exercise sheet, please use the prepared SQL script
`DB-Exercise10-KH-Testdata.sql` from the Community.

Task 1: Division

Use division to output all the events for which every student has been given a grade. In other words: all events that have been fully graded.

Task 2: Integrity

a) Change the `Student_in_Event` table definition so that when a student is de-registered, all grades are removed automatically.

b) Change the `Events` table definition so that when a lecturer resigns, their events no longer have a lecturer.

c) Change the `Events` table definition so that if a lecturer's name changes as a result of marriage, the name in the `Events` table changes automatically.

d) Change the `Student_in_Event` table definition so that if the name of an event changes, the foreign key is also changed automatically.

Task 3: Triggers

Create a trigger that automatically creates an event titled "Introduction <Lecturer_Name>" every time a lecturer is successfully entered into the `Lecturers` table. You can use the date functions in order to schedule the event for the next semester after the entry date or to accept `ss99` as a simplification.

Task 4: Views and access control

a) Save a view in the database that you name `Event_Plan` which shows all students when they have an event with whom and where.

b) Allow read access for the `public` user group and remove the insertion and deletion rights of the `public` user group for the `Event_Plan` view. Log in to your database as a `public` user and check the result.